

Bridging Policy and Practice: An Examination of the Implementation of Play-based Learning in Rwandan Preschool Classrooms

Christine Osae^{1*}

^{1*} Unicaf University Zambia Plot 20842, Off Alick Nkhata Road (Opposite United Nations Headquarters), Longacres, Lusaka, Zambia.

***Correspondence:** Christine Osae

The authors declare that no funding was received for this work.



Received: 20-September-2025

Accepted: 30-September-2025

Published: 03-October-2025

Copyright © 2025, Authors retain copyright. Licensed under the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. <https://creativecommons.org/licenses/by/4.0/> (CC BY 4.0 deed)

This article is published in the **MSI Journal of Multidisciplinary Research (MSIJMR)** ISSN 3049-0669 (Online)

The journal is managed and published by MSI Publishers.

Volume: 2, Issue: 9 (September-2025)

ABSTRACT: This research assesses the practical application of mandated play-based learning principles within preschool classrooms in Rwanda. Employing a convergent parallel mixed-methods design, the study integrates qualitative data from semi-structured interviews with 10 educators, who were purposefully selected from 16 schools in the Gasabo District, and quantitative data from systematic observations of 54 preschool teachers. The results indicate a pronounced divergence between educational policy and classroom reality. A mere 28.4% of observed teacher-student interactions demonstrated the use of foundational play-based methods like scaffolding, open-ended questioning, and formative assessment. Despite the national curriculum's official endorsement of theme-based, play-centered instruction, a significant number of teachers indicated that their lesson planning is motivated by regulatory compliance rather than a dedicated effort to improve instructional quality. The investigation pinpoints structural, institutional, and professional challenges as the principal obstacles to the successful adoption of play-based learning. Consequently, this paper puts forward recommendations for systemic reform, including the reinforcement of teacher preparation programs, the provision of targeted professional development, support for

curriculum deconstruction, enhanced resource allocation, and the restructuring of accountability systems to focus on instructional excellence.

Keywords: *Early Years Pedagogy, Policy Implementation Gap, Play-Based Learning, Rwandan Education, Teacher Training, Classroom Implementation Obstacles.*

Introduction

Although human learning is a lifelong endeavor, the early childhood years offer a singular opportunity for foundational developmental and educational progress. During this critical period, play functions as an essential mechanism for young children to investigate their surroundings and build fundamental skills. When play is characterized by joy, meaning, active engagement, and social interaction, it cultivates the core competencies necessary for success in the initial primary grades and throughout life. These competencies encompass not just subject-matter knowledge but also the metacognitive ability to learn how to learn. Complemented by social, emotional, and communication skills, these capacities establish the foundation for school readiness.

Across the African continent, play has traditionally been a central element of early socialization and development, expressed through cultural forms like songs, riddles, and games. Yet, its integration into formal educational environments is notably inconsistent. This holds especially true in under-resourced settings, where constraints on teacher capacity and significant structural limitations frequently impede pedagogical innovation. Furthermore, existing research suggests that while play is often acknowledged as a pedagogical tool in policy documents, its practical application is commonly neglected in both pre-service and in-service teacher training initiatives. This discrepancy is critical; rectifying it is imperative, as robust skills development and mentorship are essential for empowering teachers to implement, integrate, and maintain play-based methodologies in their classrooms.

In the particular context of Rwanda, play-based learning is an officially stated priority within the country's competency-based educational framework. In spite of this formal support, the persistence of colonial-era rote learning traditions, combined

with inadequate teacher training and a scarcity of resources, poses considerable challenges to its effective implementation. This study operates on the premise that educators are the primary drivers of instructional transformation. It draws upon an existing body of literature that emphasizes the significant influence of teacher knowledge, personal beliefs, and classroom conduct in forming early learning environments and co-constructing valuable play experiences. In preschool and early primary contexts, the ability of teachers to conceptualize, execute, and evaluate play-based educational activities is crucial for cultivating deep engagement and facilitating holistic child development.

Informed by this background, the current study delves into the degree to which Rwandan educators comprehend, prepare for, and apply play-based approaches. It further probes the institutional and professional dynamics that influence these practices. The research is driven by the considerable potential of play-based learning to promote equity, enhance cognitive engagement, and ensure cultural relevance in early childhood education throughout Sub-Saharan Africa. The findings from this inquiry are intended to enrich the scholarly conversation on early childhood pedagogy, offer practical insights for national policymakers, inform the creation of teacher professional development programs, and foster the methodical integration of child-centered, culturally attuned practices across Rwanda's early education sector.

Literature Review

In modern educational scholarship, play-based learning has become a key focus in the transition from conventional rote memorization to more developmentally suitable instructional methods. This pedagogical framework is increasingly valued not just as a vehicle for holistic growth but also as a strategy for promoting equity, boosting learner participation, and guaranteeing contextual applicability in early education. In contrast to prevalent myths, play is not an inconsequential distraction from academic work; rather, it is a fundamentally educational activity. Its success depends on the educator's skill in creating and guiding meaningful interactions that are in sync with children's developmental stages and curricular objectives.

Despite the extensive documentation of this approach's advantages, its execution is met with persistent difficulties worldwide. Research demonstrates that a substantial number of preschool educators, especially in low- and middle-income nations, do not have the requisite training to deploy play-based pedagogy proficiently. Common barriers to classroom reform include insufficient professional credentials, restricted exposure to teaching methods specific to early childhood, and deeply rooted adherence to traditional, teacher-dominated instructional paradigms. These challenges are amplified by systemic problems like oversized classes, immense pressure for academic results, and a deficit of adequate material and institutional backing.

To effectively weave play into the educational fabric, educators must possess a complex skill set known as pedagogical content knowledge (PCK), which enables them to convert their subject matter expertise into flexible, student-focused methods. First articulated by Shulman (1987) as the distinct integration of content mastery and pedagogical proficiency to promote student understanding, the PCK concept has since been expanded. Grossman (1990) widened the model to include curricular knowledge and the teacher's broader instructional aims, whereas Magnusson et al. (1999) incorporated orientations toward teaching and assessment knowledge as further key elements. More recently, the Refined Consensus Model (RCM) developed by Carlson et al. (2019) presents PCK as a fluid concept made up of three interconnected areas: collective PCK (cPCK), personal PCK (pPCK), and enacted PCK (ePCK). These areas are perpetually influenced by pedagogical reasoning and professional self-assessment.

Within the realm of early childhood education, PCK is vital. It equips educators to make well-founded instructional choices that artfully blend academic material with exploratory, play-based engagements. Moreover, it allows teachers to modify instructional aids, design thematic lesson structures, and evaluate student progress using unconventional assessment techniques.

Although Rwanda's shift toward competence-based and learner-centered instruction indicates a strong dedication to reform, empirical investigation into the incorporation of play-based learning in its early childhood settings is scarce. While some studies

have examined the advantages of play-based strategies for improving language skills and student participation at the upper primary and secondary levels in Rwanda, they frequently lack a robust theoretical foundation in PCK. Such studies typically approach play as a generic teaching strategy instead of probing the specific teacher competencies needed for its effective application in the early years.

Research from neighboring Ethiopia points to analogous difficulties, uncovering enduring gaps in the conceptualization, planning, and implementation of play-based pedagogy in preschool environments. This indicates a wider regional challenge in converting the principles of play-based learning into concrete classroom actions. Similarly, other research highlights deficiencies in fundamental teacher training, including minimal exposure to educational psychology and developmentally appropriate teaching methods. However, the current literature has not yet systematically investigated the nexus of play-based learning and teacher knowledge models like PCK, nor has it assessed how these elements impact pedagogical choices within Rwanda's competency-based preschool system. This study seeks to address this gap by exploring how Rwandan early childhood educators comprehend, assimilate, and execute play-based learning through the framework of PCK, thus providing a more detailed understanding of the interplay between policy directives, teacher capabilities, and instructional practice.

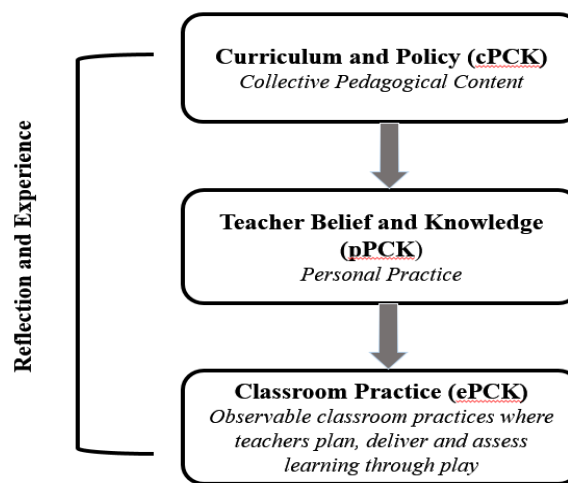
This inquiry is theoretically anchored in PCK theory, relying specifically on the three conceptual layers outlined in the Refined Consensus Model (RCM) by Carlson et al. (2019):

- **Collective PCK (cPCK):** This denotes the shared, research-supported professional knowledge base related to play-based learning. It comprises official curriculum mandates, national policy statements, and recognized best practices that arise from institutional and professional discourse.
- **Personal PCK (pPCK):** This includes the distinct beliefs, abilities, and knowledge that an individual teacher holds regarding the integration of play into their instructional practice. This area is influenced by personal training, classroom experiences, and continuous reflection.

- **Enacted PCK (ePCK):** This is the observable application of knowledge within the classroom, where educators plan, conduct, and evaluate learning activities through play. It serves as the tangible expression of their personal and collective understanding.

The interplay between these domains is depicted in the conceptual framework presented in Figure 1.

Figure 1: Conceptual Framework



Methodology

This investigation utilized a convergent parallel mixed-methods design to assess the congruence—or incongruence—between Rwanda's national policy objectives for play-based instruction and its real-world application in preschool settings. The research sought to combine quantitative data derived from classroom observations with qualitative perspectives gathered from teacher interviews. This methodology enabled a thorough analysis that captures both discernible teaching behaviors and the underlying pedagogical rationale of the educators. The mixed-methods design was selected to triangulate the results, thereby bolstering the credibility, transferability, and contextual depth of the study's conclusions.

Setting and Participants

The research took place in 16 preschools, encompassing both public and private institutions, within the Gasabo District of Rwanda. This district was chosen for its demographic variety, accessibility, and its robust engagement in early childhood

education reform projects backed by both national and partner entities. A total of 54 Early Childhood Education (ECE) teachers were observed during live classroom instruction. Data were gathered via a standardized observation rubric created to assess key markers of play-based pedagogy. These observations spanned a diverse array of educational environments and instructional styles across institutions with different levels of resource availability.

From this cohort, a subsample of 10 teachers, constituting roughly 20% of the observed group, was selected for semi-structured interviews. This sample size is consistent with established qualitative research standards, which suggest conducting in-depth interviews with 20–30% of observed individuals to capture representative diversity. A purposive sampling method was used to ensure maximum variation within the interview subsample, incorporating a range of observed instructional effectiveness (low, medium, and high), teacher certification levels, years of experience, and school classification (public vs. private). This selection strategy ensured that the qualitative data would embody a wide array of pedagogical viewpoints and contexts, thereby enhancing the richness and validity of the findings.

Data Collection

The observation tool was created by the researcher, drawing upon the theoretical principles of the Refined Consensus Model (RCM) and supplemented by established literature on play-based learning. To confirm its content validity and appropriateness for the local setting, the tool was assessed by subject matter specialists and subsequently trialed in two preschools not included in the final study.

The semi-structured interview guide was developed to obtain detailed perspectives on teachers' views and experiences concerning play-based pedagogy. Its structure was informed by the Pedagogical Content Knowledge (PCK) conceptual framework and prominent themes that emerged during the literature review. The instrument was evaluated for clarity and pertinence by experts in early childhood education. It was then piloted with two preschool educators from outside the primary study group to refine the wording and ordering of the questions.

To guarantee uniformity in the observational coding, four trained raters independently assessed 20% of the classroom sessions using the observation instrument. Inter-rater reliability was calculated using Cohen's Kappa, which resulted in an average value of $\kappa=0.82$ across the paired analyses. This figure indicates substantial agreement, as per the criteria established by Landis and Koch (1977), and reinforces the credibility and consistency of the quantitative data.

Data Analysis

Information from the interviews was examined using thematic analysis, following the six-phase process articulated by Braun and Clarke (2006). An inductive coding method was applied, which permitted categories and themes to be generated directly from the data instead of being predefined. These initial codes were subsequently consolidated into wider thematic areas that reflected the study's main lines of inquiry, such as teacher training, curriculum adherence, and resource availability.

The quantitative data from the classroom observations were analyzed descriptively, employing frequency counts and percentages to ascertain the prevalence of particular play-based teaching practices. These practices were grouped into three categories: pedagogy, learning environment, and curriculum.

The qualitative and quantitative data sets were synthesized during the interpretation stage. A joint display matrix was employed to cross-reference patterns from the observational data with the outcomes of the teacher interviews. This method helped to pinpoint areas of convergence and divergence between the teachers' self-reported experiences and their observed classroom behaviors.

Ethical Procedures

Ethical approval for this research was obtained from the Rwandan Ministry of Education and the leadership of the participating schools. All participating educators gave informed consent after a comprehensive briefing on the study's objectives, methods, and voluntary participation. To safeguard participant confidentiality, pseudonyms were assigned, and all data were kept in a secure manner. Digital records were password-protected, while physical documents were stored in locked

cabinets accessible only to the researcher. These protocols were enacted to adhere to the ethical tenets of autonomy, confidentiality, and responsible data handling.

Limitations of the Study

This research was confined to a single district in Rwanda, which could restrict the applicability of its conclusions to other areas with distinct sociocultural or institutional characteristics. Nonetheless, the application of a mixed-methods convergence design enhances the depth and trustworthiness of the findings by triangulating information from varied sources. Furthermore, the possibility that the researcher's presence might have influenced classroom dynamics, a phenomenon known as the Hawthorne effect, is an acknowledged limitation. To counteract this potential bias, methodological triangulation was used, incorporating teacher self-reports, interviews, and classroom artifacts to strengthen the validity of the interpretations. These constraints should be regarded not as flaws but as avenues for future investigation, especially multi-location and longitudinal studies that could evaluate the scalability and relevance of these findings across more diverse educational settings.

Findings

Part I: Lesson Observations

This study assessed classroom practices using 41 teaching indicators across three fundamental domains of early childhood education: **Pedagogy** (14 items), **Learning Environment and Learner Engagement** (13 items), and **Curriculum Implementation and Planning** (14 items). Each indicator was evaluated as a binary result ("Yes" for observed, "No" for not observed), yielding 1,876 total data points. Among these, only 731 observations (39.0%) confirmed the presence of the intended practice, whereas 1,145 observations (61.0%) showed it was absent. Table 1 presents a breakdown of these frequencies by domain.

Table 1: Observed Frequencies across Domains

Domain	Yes (n)	No (n)	Total	% Yes	% No
Pedagogy	176	444	620	28.40%	71.60%
Learning Environment & Engagement	280	398	678	41.30%	58.70%
Curriculum Implementation & Planning	275	303	578	47.60%	52.40%
Overall	731	1145	1876	39.00%	61.00%

The combined results highlight a substantial gap between educational theory and classroom application, with fewer than half of the desired practices being observed. The **Pedagogy** domain exhibited the widest disparity; of 620 total observations, only 176 instances (28.4%) of desired practices were noted, versus 444 absences (71.6%). This gap strongly indicates that preschool educators are not systematically or proficiently using play-based instructional methods.

In the area of **Learning Environment and Learner Engagement**, 41.3% of the observations were positive (280 out of 678), while 58.7% were negative (398). The **Curriculum Implementation and Planning** domain fared somewhat better but still did not meet expectations, with 47.6% "Yes" observations (275 out of 578) and 52.4% "No" observations (303).

Domain-Specific Findings

Pedagogical Domain

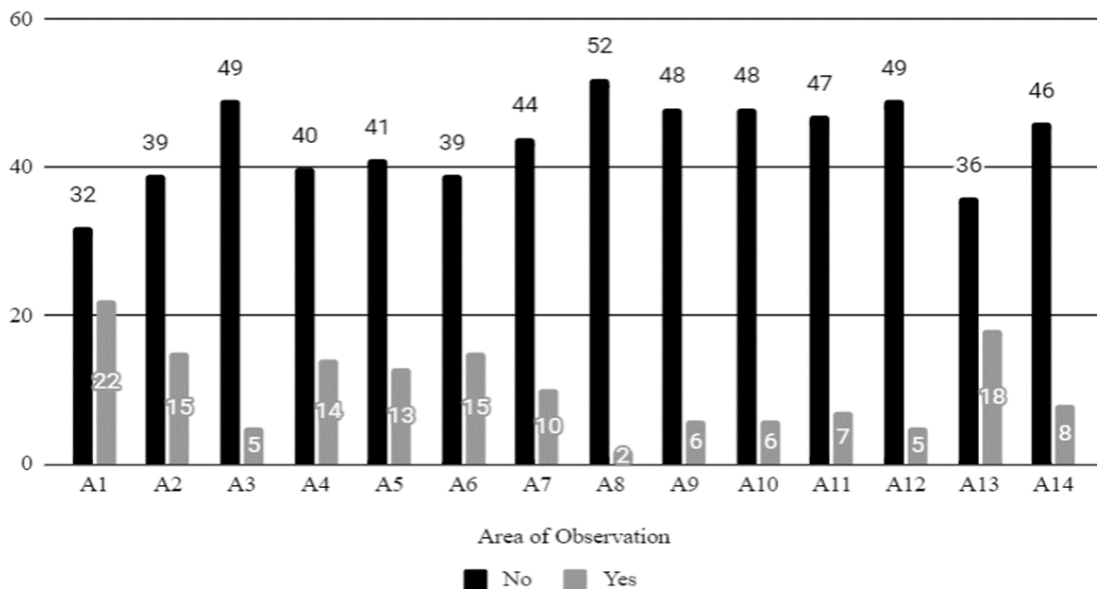
The pedagogical domain was evaluated against fourteen specific indicators (A1–A14). Observations centered on whether educators scaffolded children's learning (A1), actively engaged in play to demonstrate skills (A2), and employed open-ended questions to promote deeper cognitive processing (A3). The assessment also considered the alignment of materials with learning objectives (A4), the extent to which teachers empowered student autonomy (A5), and the use of encouraging language (A6). Additional indicators covered the cultural inclusiveness of play materials (A7), the provision of equitable play opportunities (A8), engagement in critical thinking exercises, and the documentation of children's play. Lastly, the

evaluation looked at the delivery of constructive feedback (A12), the use of holistic assessments (A13), and the application of formative assessment during play (A14).

As shown in Figure 2, pedagogical practices revealed the lowest degree of implementation. Out of 620 observations in this area, a mere 176 (28.4%) were positive, while 444 (71.6%) were negative. Major areas of deficiency included:

- **Scaffolding learning experiences:** Evident in only 22 instances (41%).
- **Teacher participation in play:** Witnessed in just 15 cases (28%).
- **Use of open-ended questions:** Extremely infrequent, occurring on only 5 occasions (9%).
- **Providing constructive feedback:** Also exceptionally rare, recorded in just 5 cases (9%).
- **Equitable engagement opportunities:** Nearly absent, observed only twice (4%).
- **Formative assessment during play:** Applied in a mere 8 instances (15%).

Figure 2: Observed Scores on the Pedagogy Domain

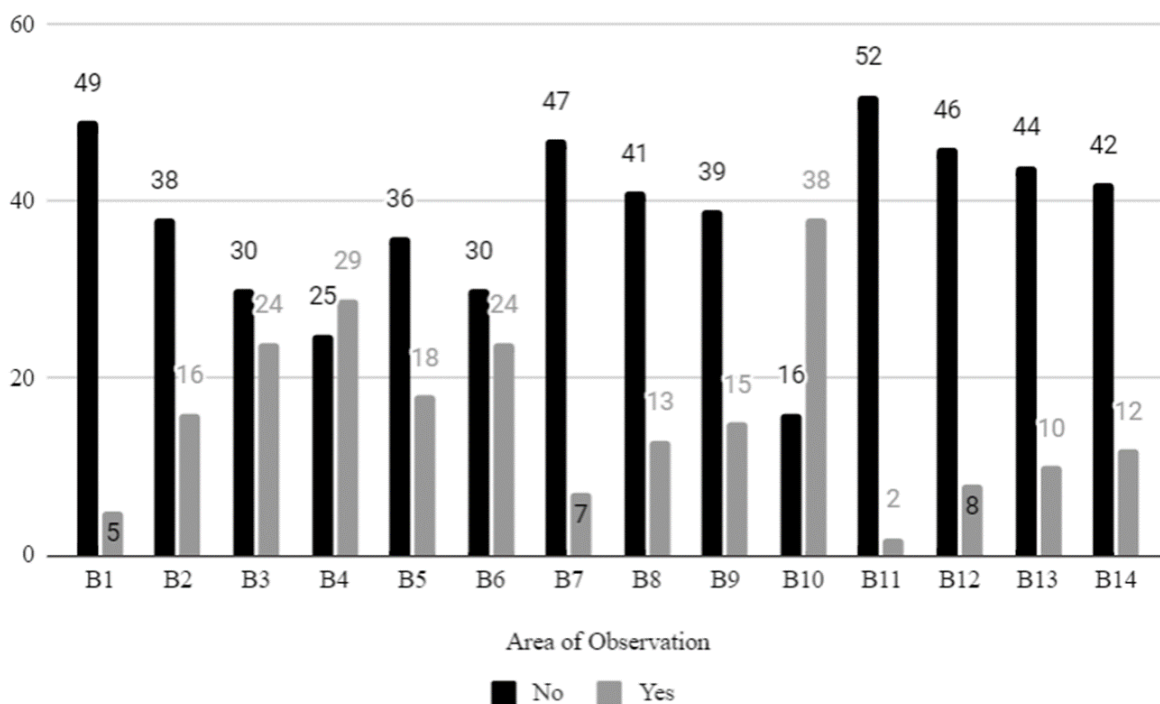


These statistics suggest a predominantly custodial teaching model, marked by an absence of intentional scaffolding, guided inquiry, or reflective assessment—all of which are fundamental to genuine play-based learning.

Learning Environment and Student Engagement Domain

The learning environment was assessed with fourteen indicators (B1–B14). These markers evaluated the accessibility and organization of play materials (B1, B2), the quality of indoor and outdoor learning areas (B3), and the safety and welcoming nature of the classroom (B4, B5). Observations also examined the age-appropriateness of furniture (B6), the availability of improvised educational resources (B7), and teacher efforts to include all children (B8). Further elements included the cultural relevance of the environment (B9), the accessibility of classroom language (B10), the exhibition of children's work (B11), and the levels of active participation and interaction among peers (B12, B13, B14).

Figure 3: Learning Environment and Student Engagement Domain



As depicted in Figure 3, this domain yielded slightly improved results, although performance was still below standard. Strengths were identified in creating **safe and inviting indoor environments** (present in 54% of classrooms) and using **accessible**

language (present in 70% of classrooms). Nonetheless, significant weaknesses remained.

- Only 9% of classrooms offered easily accessible materials to foster independent discovery.
- Improvised learning resources were available in just 13% of classes.
- Conscious efforts to engage all students were noted in only 24% of observations.
- Active student participation in play was witnessed in a mere 15% of classrooms.

The data indicate that while fundamental physical safety and linguistic clarity are being met, the majority of classrooms are not yet structured to promote learner autonomy, cultural relevance, or profound, active engagement.

Curriculum Planning and Implementation

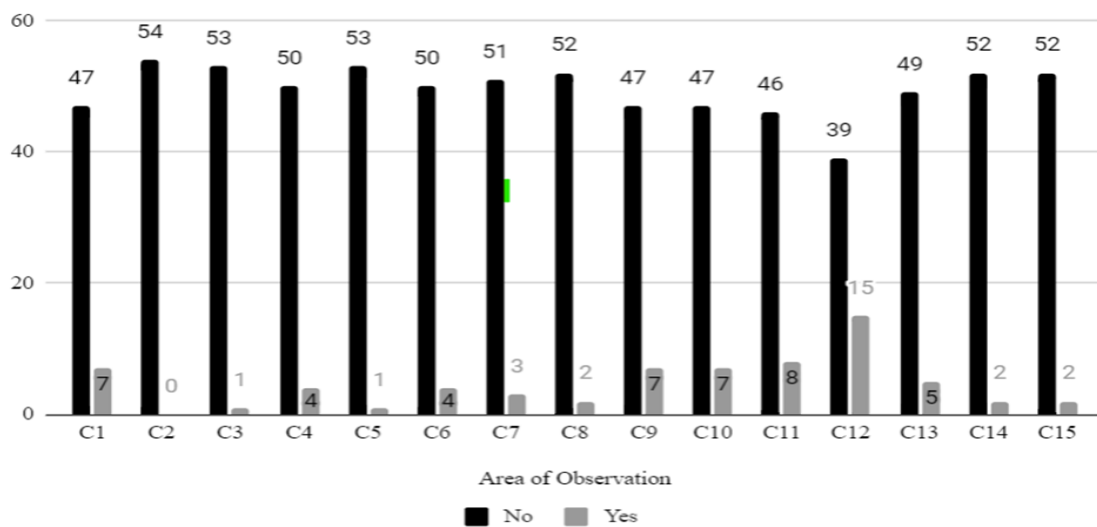
This domain was evaluated using fifteen indicators (C1–C15) that centered on thematic planning and instructional design. The assessment checked for the presence of theme-related materials (C1), the incorporation of key vocabulary (C2), and the use of multiple languages (C3). It also reviewed the integration of various learning domains within a theme (C4), children's interaction with theme displays (C5), and the alignment of themes with national curriculum standards (C6, C7, C8). The quality of teachers' lesson plans, including the variety of play-based activities (C10) and the equilibrium between child-led and teacher-facilitated activities (C11), was also considered.

Although this domain achieved the highest performance among the three, the overall outcomes were still limited. Some encouraging signs were the presence of **developmentally appropriate planned activities** (28% of classrooms) and lesson plans featuring both **child-directed and teacher-guided activities** (15% of cases). However, thorough thematic integration was exceptionally uncommon.

- Only 13% of classrooms utilized theme-related objects to foster inquiry.

- **None** of the observed classrooms (0%) incorporated essential vocabulary connected to the theme.
- Thematic integration across different learning domains was observed in just 7% of classrooms.
- Activities aimed at developing higher-order thinking were present in only 9% of cases.

Figure 4: Curriculum Planning and Implementation



These findings suggest that while a small number of classrooms show basic curricular planning, the deep thematic integration and inquiry-based methods central to effective play-based learning are largely missing. In summary, the data expose a stark inconsistency between Rwanda's policy goals for play-based learning and the actual state of classroom practice. Essential pedagogical components like scaffolding, open-ended questioning, formative assessment, and meaningful thematic integration are overwhelmingly absent.

Part II: Findings from Interviews

Professional Qualifications and Pedagogical Training

The interviews supplied crucial context for the observational findings. Only 58% of the observed educators possessed formal teaching credentials, and a mere 35.7% had undergone any specialized training in play-based pedagogy. This gap in professional

readiness was reflected in their classroom methods and personal accounts. Even some certified teachers conceded their lack of applicable training. One educator remarked,

"I studied to teach math and geography in secondary school... but I am teaching nursery one. I do my best, but I wasn't trained on how young children learn" (T2).

Others voiced frustration with the absence of practical instruction, with one noting,

"We've been hearing about play-based learning for a long time, but nobody has shown us how to use it in our teaching" (T4).

Many teachers defined play as unstructured outdoor activity, signaling a basic misunderstanding of its pedagogical role. As one interviewee stated,

"Children go outside to play at break time... We don't play in the classroom because I am teaching phonics" (T1).

This remark underscores the view of play as an extracurricular pursuit rather than a primary instructional method. These qualitative perspectives directly align with the observational results, especially the very low implementation rates of scaffolding and formative assessment, indicating that educators are often hindered by insufficient qualifications and a deficit of specialized training.

Curriculum Planning and Implementation

The interviews also revealed considerable difficulties concerning curriculum planning and delivery. A large number of teachers conceded that they develop lesson plans mainly to evade disciplinary action from regulatory authorities, rather than to enhance their instructional effectiveness. This compliance-oriented approach was articulated by one teacher who stated,

"I know that when NESB [the national examination board] visits and I lack a plan, I could receive a negative report... In fact, one could be dismissed for not having it" (T7).

Teachers also reported challenges in converting the broad national curriculum into workable daily lessons. One participant clarified,

"The curriculum guide exists... but it's difficult to apply. We require assistance to understand how to break it down into daily lessons" (T5).

This difficulty has prompted some to adopt lesson plans from peers in more affluent schools. One teacher admitted,

"I just use the plan from my friend. She used to teach at an international school... I use her lesson plans because they plan exceptionally well there for the Cambridge Curriculum" (T9).

These testimonies correspond with the observational data indicating superficial curriculum application and limited thematic integration, confirming that without direct assistance, even well-intentioned educators find it challenging to implement play-based learning proficiently.

Challenges with Integrating Play-based Strategies

A recurring theme in all interviews was the existence of significant logistical and structural obstacles that obstruct the use of play-based methods. Teachers consistently mentioned severe time limitations, which are exacerbated by strenuous double-shift schedules and the pressure to cover the syllabus before national examinations. One educator described her schedule:

"I work a double shift... I arrive at school at 7:45 AM and at lunchtime, a new group of students arrives... I'm here until 5 PM and... I have no time for preparation" (T10).

Academic demands also compel teachers to favor rote instruction over play. Another educator elaborated,

"This is the third term for the NESA exams and I haven't finished the syllabus... the headteacher says they play too much and I must teach them quickly without play" (T3).

This situation reveals a systemic conflict between developmental objectives and performance standards, forcing teachers to set aside play to concentrate on exam readiness.

Resource scarcity was another significant constraint. Teachers depicted classrooms entirely lacking toys or educational aids, compelling them to use improvised items like stones and sticks, which were frequently lost or damaged. These structural barriers—heavy workloads, syllabus pressures, and insufficient resources—are directly mirrored in the observational data showing limited active engagement and thematic learning.

Discussion

This study was designed to assess the implementation of play-based learning in Rwandan preschools, as stipulated by the national early childhood education policy. The integrated findings from classroom observations and teacher interviews show a substantial implementation deficit, defined by inadequate teacher capacity, superficial curriculum engagement, and significant structural barriers. These outcomes are consistent with a growing body of literature that reports similar inconsistencies between policy and practice in other low-resource educational settings.

Deficiencies in Educational Methodology

A key discovery of this study is the infrequent application of core play-based teaching strategies. The observational data revealed remarkably low instances of scaffolding (41%), open-ended inquiry (9%), and teacher-guided play (28%). The interview data corroborated these quantitative results, with many educators—including those with formal credentials—acknowledging a lack of specialized training in early childhood or play-based approaches. This absence of preparation is highly problematic from a sociocultural standpoint, which, drawing on Vygotsky's theories, regards play not as simple recreation but as a vital framework for cognitive and social growth within the Zone of Proximal Development. Without proficient teacher facilitation, the significant developmental advantages of play-based learning remain unrealized.

Curriculum as Compliance Rather Than Pedagogy

Another important finding is the widespread perception of curriculum documents as tools for compliance rather than as frameworks for effective pedagogy. Although Rwanda's national ECE curriculum promotes thematic, play-based, and integrated learning, educators reported that lesson planning often serves as a performative task aimed at meeting administrative demands. This was evident in the classroom observations, which showed minimal thematic integration, a lack of cognitive challenge, and few links to the learners' cultural backgrounds. These results support the assertion that well-crafted curriculum frameworks by themselves are insufficient to ensure effective classroom practice. Without robust support mechanisms—such as mentorship, dedicated collaborative planning periods, and structured opportunities for curriculum deconstruction—it is extremely challenging for teachers to convert policy into child-centered learning experiences.

Structural and Resource Limitations

This study highlights the major structural obstacles that hinder the adoption of play-based learning in numerous Rwandan preschools. Teachers reported being constrained by double-shift schedules that provide little time for planning or reflection, and by classrooms that are devoid of even the most fundamental learning aids. These accounts were confirmed by observations of learning environments that were inadequately equipped to facilitate inclusive or engaging play. These findings align with research in other low- and middle-income nations, where issues like overcrowded classrooms, high-stakes testing pressures, and persistent underfunding foster conditions in which rote instruction often displaces holistic, developmentally appropriate methods. Consequently, the very pedagogical strategies that could most benefit young learners are frequently the first to be discarded.

Synthesis

Ultimately, the findings reveal a clear schism between Rwanda's policy objectives and the practical reality of its preschool education system. The national curriculum's vision for play-based, culturally relevant, and inclusive education is hampered by three interrelated challenges: 1) insufficient educator training in play-based

pedagogy; 2) inadequate instructional leadership and curriculum support; and 3) ongoing material deficits and institutional pressures. In the absence of targeted interventions that tackle these systemic problems, the potential of play-based learning as a transformative educational approach will likely go unrealized.

Recommendations

Based on the study's conclusions, the following measures are recommended to close the policy-practice gap in the implementation of play-based learning:

1. **Revise Teacher Preparation and Professional Development:** Pre-service teacher education curricula should incorporate compulsory, practice-focused modules on play-based pedagogy. In-service professional development needs to progress beyond isolated workshops to encompass sustained mentorship, in-classroom coaching, and reflective practice communities centered on the application of play-based methods.
2. **Support Curriculum Deconstruction and Instructional Leadership:** National and district education bodies should spearhead systematic programs to assist teachers in "deconstructing" the curriculum. This involves furnishing sequential guides, sample lesson plans, and collaborative planning opportunities to aid in translating policy into practice. School leaders also require training on how to coach and champion the implementation of play-based learning within their schools.
3. **Improve Resource Allocation and Management:** A significant issue identified was the lack of suitable learning materials. Investment should be directed toward locally sourced, durable, and user-friendly resources. Schools must also develop clear protocols for managing and preserving these materials, including providing secure storage, to guarantee their durability and availability.
4. **Reform Accountability and Monitoring Frameworks:** Existing monitoring systems frequently place undue emphasis on administrative compliance (e.g., verifying lesson plans and monitoring syllabus progress). Accountability frameworks should be restructured to prioritize the quality of classroom

interactions, including how educators engage with children and the degree of active learner involvement. This change demands a shift toward observational feedback and supportive evaluation.

5. **Address Teacher Workload and Structural Pressures:** Heavy teaching responsibilities, especially in schools operating on double-shift systems, severely restrict teachers' capacity for planning and reflection. Policymakers should investigate restructuring schedules to grant educators sufficient preparation time. In schools facing severe workload issues, deploying additional support personnel or reducing class sizes may be essential to foster an environment where high-quality, play-based instruction can thrive.

Conclusion

This study's detailed analysis of play-based learning in Rwandan preschools offers a crucial insight: while national policies and curriculum documents may endorse progressive, child-centered education, this vision has not yet materialized in many classrooms. A substantial gap remains, fueled by a mix of inadequate teacher training, systemic constraints, and a deficit of essential resources. The research demonstrates that well-intentioned policies alone are not enough. For play-based learning to be genuinely integrated into practice, a comprehensive and persistent effort is necessary—one that encompasses robust teacher education, ongoing professional guidance, access to suitable learning aids, and effective instructional leadership.

These conclusions have significant relevance for other low- and middle-income countries that are also endeavoring to incorporate play-based learning into their early childhood education frameworks. The journey from policy formulation to practical application is laden with obstacles. To guarantee the success of early childhood reforms, policymakers and stakeholders must transcend rhetoric and directly address the deep-rooted structural, institutional, and professional barriers that stifle innovation in the classroom. The future success of play-based learning in Rwanda and comparable contexts depends on a coherent, multi-faceted strategy that

intentionally and strategically aligns policy ambitions with the practical realities of teaching and learning.

References

1. Abu-Ghaida, D., & Silva, K. (2021). *Educating the forcibly displaced: Key challenges and opportunities*. Reference Paper for the 70th Anniversary of the 1951 Refugee Convention.
2. Adams, A. K., Asemnor, F., & Nkansah, V. (2024). Play-based pedagogy in Ghanaian basic schools: A review of related literature. *Asian Journal of Advanced Research and Reports*, 18(3), 17–28. <https://doi.org/10.9734/ajarr/2024/v18i3611>
3. Alam, A., & Mohanty, A. (2023). Cultural beliefs and equity in educational institutions: Exploring the social and philosophical notions of ability groupings in the teaching and learning of mathematics. *International Journal of Adolescence and Youth*, 28(1), 2270662. <https://doi.org/10.1080/02673843.2023.2270662>
4. Alonzo, A. C., Berry, A., & Nilsson, P. (2019). Unpacking the complexity of science teachers' PCK in action: Enacted and personal PCK. In A. Hume, R. Cooper, & A. Borowski (Eds.), *Repositioning pedagogical content knowledge in teachers' knowledge for teaching science* (pp. 273–288). Springer. https://doi.org/10.1007/978-981-13-5898-2_12
5. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
6. Burson, S. L. (2021). *In-school play opportunities, academic achievement, and social-emotional well-being* [Doctoral dissertation, University of Texas at Austin]. Texas ScholarWorks. <http://dx.doi.org/10.26153/tsw/30559>

7. Cappiali, T. M. (2023). A paradigm shift for a more inclusive, equal, and just academia? Towards a transformative emancipatory pedagogy. *Education Sciences*, 13(9), 876. <https://doi.org/10.3390/educsci13090876>
8. Carlson, J., Daehler, K. R., Alonzo, A. C., Barendsen, E., Berry, A., Borowski, A., ... Wilson, C. D. (2019). The refined consensus model of pedagogical content knowledge in science education. In A. Hume, R. Cooper, & A. Borowski (Eds.), *Repositioning pedagogical content knowledge in teachers' knowledge for teaching science* (pp. 77–92). Springer Nature. https://doi.org/10.1007/978-981-13-5898-2_2
9. Creswell, J. W. (2012). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Sage.
10. Danniels, E., & Pyle, A. (2023). Inclusive play-based learning: Approaches from enacting kindergarten teachers. *Early Childhood Education Journal*, 51(7), 1169–1179. <https://doi.org/10.1007/s10643-022-01369-4>
11. Dowd, A., & Thomsen, B. (2021). *Learning through play: Increasing impact, reducing inequality - White paper*. Teacher Task Force.
12. Geletu, G. M. (2023). Conceptualisation and implementation of play-based curriculum and pedagogy in early childhood education in preschools in Oromia Regional State, Ethiopia. *Education*, 51(3), 503-516. <https://doi.org/10.1080/03004279.2023.2169050>
13. Grossman, P. L. (1990). *The making of a teacher: Teacher knowledge and teacher education*. Teachers College Press.
14. Johnstone, A. (2022). An inquiry into teachers' implementation of play-based learning aligned approaches within senior primary classes. *Kairaranga*, 23(1), 17–34.
15. Kangas, J., Lastikka, A.-L., & Arvola, O. (2023). Inclusive play: Defining elements of playful teaching and learning in culturally and linguistically diverse ECEC. *Education Sciences*, 13(9), 956. <https://doi.org/10.3390/educsci13090956>

16. Keung, C. P. C., & Cheung, A. C. K. (2019). Towards holistic supporting of play-based learning implementation in kindergartens: A mixed-method study. *Early Childhood Education Journal*, 47(5), 627–640. <https://doi.org/10.1007/s10643-019-00956-2>
17. Kwok, P. K. (2021). *The implementation of learner-centred pedagogy in Rwanda: Teachers as mediators* [Doctoral dissertation, University of Cambridge]. Apollo - University of Cambridge Repository. <https://doi.org/10.17863/CAM.83227>
18. Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159–174. <https://doi.org/10.2307/2529310>
19. Li, J. (2023). *A research on the relationship between student-centred approach and student competence development in higher education: Case studies in China and Italy*. Padua Research Archive. <https://hdl.handle.net/11577/3484866>
20. Lohmander, M., & Samuelsson, I. (2022). Challenges and dilemmas with play-based pedagogy in Swedish early childhood education. In M. Fler & B. van Oers (Eds.), *Play and learning in early childhood education and care* (pp. 147–160). Routledge.
21. Lungu, S., & Matafwali, B. (2020). Play-based learning in early childhood education (ECE) centres in Zambia: A teacher perspective. *European Journal of Education Studies*, 7(12), 356–369.
22. Magnusson, S., Krajcik, J., & Borko, H. (1999). Nature, sources, and development of pedagogical content knowledge for science teaching. In J. Gess-Newsome & N. G. Lederman (Eds.), *Examining pedagogical content knowledge: The construct and its implications for science education* (pp. 95–132). Kluwer Academic Publishers.
23. Ministry of Education (MINEDUC), Republic of Rwanda. (2018). *Education sector strategic plan 2018/19 to 2023/24*.

24. Mostafa, M. (2023). *Teachers' perceptions of play-based pedagogy in developing children's literacy skills at the pre-primary level* [Doctoral dissertation, Brac University]. Brac University Institutional Repository. <http://hdl.handle.net/10361/21608>
25. Nilsson, M., & Nilsson, P. (2019). From pedagogical knowledge to pedagogical content knowledge: Development in mentor and student-teacher group conversations. *International Journal of Learning, Teaching and Educational Research*, 18(10), 233–247. <https://doi.org/10.26803/ijlter.18.10.15>
26. Niyibizi, O. (2024). Optimising PhET use in Rwandan mathematics and sciences teaching. *International Journal of Research in STEM Education*, 6(2), 1–14. <https://doi.org/10.33830/ijrse.v6i2.1649>
27. Niyibizi, O., Kazinyirako, J. P., Gasigwa, J. B., Mukeshimana, A. M., Singirankabo, J. N., Bintunimana, C., & Mutarutinya, V. (2024). Teachers' understanding of play-based learning implementation on students' achievement. *Universal Journal of Educational Research*, 3(4), 374–385.
28. Park, S., & Oliver, J. S. (2007). Revisiting the conceptualisation of pedagogical content knowledge (PCK): PCK as a conceptual tool to understand teachers as professionals. *Research in Science Education*, 38(3), 261–284. <https://doi.org/10.1007/s11165-007-9049-6>
29. Pyle, A., Pyle, M., Prioletta, J., & Alaca, B. (2021). Portrayals of play-based learning: Misalignments between public discourse, classroom realities, and research. *Early Years*, 41(2-3), 218-231. <https://doi.org/10.1080/09575146.2021.1896803>
30. Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1–23. <https://doi.org/10.17763/haer.57.1.j463w79r56455411>
31. Smith, P. K., & Pellegrini, A. D. (2013). Learning through play. In *Encyclopedia on early childhood development*. Centre of Excellence for Early Childhood

Development. <https://www.child-encyclopedia.com/play/according-experts/learning-through-play>

32. Taiwo Ogunyemi, F., & Henning, E. (2020). From traditional learning to modern education: Understanding the value of play in Africa's childhood development. *South African Journal of Education*, 40(S2), a1768. <https://doi.org/10.15700/saje.v40ns2a1768>
33. United Nations Children's Fund (UNICEF). (2018). *Learning through play: Strengthening learning through play in early childhood education programs*.
34. Van Driel, J., & Berry, A. (2019). Pedagogical content knowledge in preservice teacher education. In M. A. Peters (Ed.), *Encyclopedia of teacher education*. Springer. https://doi.org/10.1007/978-981-13-1179-6_176-1
35. Veraksa, A., Sukhikh, V., Veresov, N., & Almazova, O. (2022). Which play is better? Different play types and the development of executive functions in early childhood. *International Journal of Early Years Education*, 30(3), 560–576. <https://doi.org/10.1080/09669760.2022.2091979>
36. Veraksa, N., Colliver, Y., & Sukhikh, V. (2022). Piaget and Vygotsky's play theories: The profile of twenty-first-century evidence. In N. Veraksa & N. Veresov (Eds.), *Piaget and Vygotsky in the XXI century: Discourse in early childhood education* (pp. 165-190). Springer. https://doi.org/10.1007/978-3-031-05747-2_10