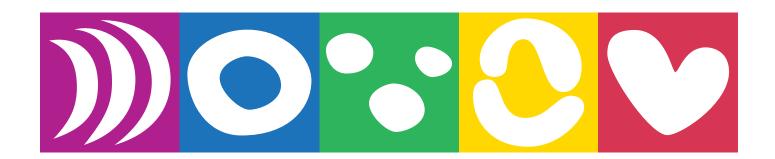


Learning Synthesis



Advancing Learning through Play in Early Childhood Education



Who are we:

The LEGO Foundation-funded Play Our Part (PoP) initiative is a community of practice made up of three early childhood education (ECE) implementers - VVOB - Education for Development, Plan International, and Voluntary Service Overseas (VSO) - working to strengthen Learning through Play (LtP) instruction and holistic learning in schools and centers. The initiative uses a multi-level approach, engaging schools, government institutions, and communities.

Engage in our Resource Package:

Innovations for Poverty Action (IPA), as PoP's Learning and Design Partner, authored this research package to consolidate implementation findings into credible recommendations and guidance for those implementing—or considering implementing—ECE and LtP programs. PoP implementing partners contributed findings and insights from their programs, with support from the LEGO Foundation. We invite you to explore these resources and join us in bringing the LtP vision to life.

Table of contents

- 3 What is the Learning Synthesis?
- 4 What is Play Our Part (PoP)?
- 5 Approach to synthesizing PoP data
- 6 PoP recommendations for LtP design and implementation
- 13 PoP Classroom Practices and TPD Recommendations
- 21 Taking a Learning Approach



What is the Learning Synthesis?

This Learning Synthesis resource presents cross-program learning on how to better design Learning through Play (LtP) interventions for early childhood education (ECE) settings where child-led and age-appropriate instructional approaches are new or in early stages of development. The PoP learning approach prioritized implementation learning, focusing on adaptive programming to meet the human, infrastructure and policy resources available. Insights are backed by data collected from a range of PoP Monitoring Evaluation and Learning (MEL) sources and developed through cross-program discussion, ensuring that all claims are evidence-based and shaped by consensus across the initiative.

This document specifically centers on learning related to teacher professional development (TPD) approaches. While these efforts were supported through a broader multi-level systems approach—including engagement with government and community stakeholders—the core interventions targeted shifts in classroom practice. Drawing on all available insights, this resource is built to help future

LtP programs design and contextualize TPD-based interventions to maximize the uptake and quality of LtP teaching methods among teachers.

The sections of this document can help you in the following ways:

Introduction: Gives background on the PoP programmatic approach, contextual features, and methodology applied for synthesising findings.

PoP Recommendations for LtP Design and Implementation: Shares the high-level insights for program design based on the whole body of data from teacher surveying, classroom observations and learner assessments.

PoP Classroom Practices and TPD

Recommendations: Provides guidance for getting teachers to adopt specific LtP instructional practices, based on what programs did, how teachers responded to those approaches, and the identification of key contributors or constraints.

What is Play Our Part (PoP)?

Play Our Part (PoP) is an early childhood education (ECE) initiative conducted in Zambia, Uganda and Rwanda from 2021 to 2025. The implementing organizations—VVOB Education for Development, Plan International, and Voluntary Services Overseas (VSO)—used a systems approach to build the capacity of ECE providers to implement LtP instructional methodologies, and strengthen the enabling environments within which those efforts exist to

engage young children in quality LTP experiences. PoP's funder, The LEGO Foundation, provided ongoing technical and directional support for programs, while Innovations for Poverty Action (IPA) as the learning and design partner supported organizations' Monitoring Evaluation and Learning (MEL) approaches, and nurtured a 'community of practice' (CoP) forum for sharing learning, methods, and tools.

Implementing Partners



TMR - Twigire Mumikino Rwanda: Let's Learn through Play Rwanda education for development

IT'S PLAY - Improving Teaching

Skills on Playful Learning for Africa's Youngest

Rwanda, Uganda, and Zambia



Playful Futures
Uganda

Funder

The **LEGO** Foundation

Learning and Design Partner









In the PoP initiative, the majority of program activities focused on directly **building teacher skills** and **improving LtP-enabling school environments.**

To **build teacher skills**, extensive program resources went towards designing and delivering LtP teacher professional development (TPD) activities. Such activities included LtP instructional workshops, teacher coaching, digital TPD content, the promotion of peer learning through mentoring or teacher CoPs, and support for sourcing LtP teaching and learning materials.

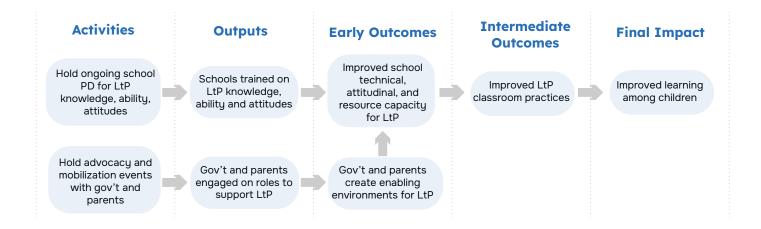
Actions **improving the LtP enabling-environment** included sensitizing school leaders to LtP methods, accompanying school leaders during classroom visits and lesson observation, integrating play principles into class observation tools, and building school-community networks for sourcing the materials used during play activities.

While TPD is at the centre of this resource's findings and recommendations, all PoP programs took a **multi-leveled systems-strengthening approach**

and conducted additional activities with non-school actors at different levels of the ECE schooling system, namely:

- Programs engaged parents and communities in LtP awareness raising activities to promote an enabling environment for LtP in response to the play material needs of teachers.
- Programs engaged national and district-level government institutions by sharing LtP evidence, accompanying them on classroom observations, and supporting technical government teams with LtP methods and content development.

The PoP initiative documented its learning journey by implementing a **theory of change approach.** While each program developed a unique theory of change based on early needs assessments and contextual characteristics, all PoP programs shared the same core series of activities and outcomes, which are captured in the simplified theory of change diagram below.

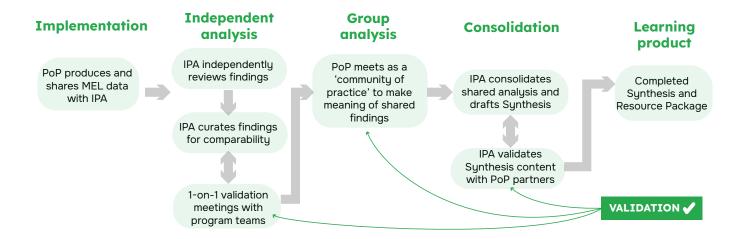






Approach to synthesizing PoP data

The PoP initiative undertook a series of validation processes in order to ensure that the recommendations made in this synthesis are substantiated by evidence and consensus across PoP programs. Visualized below, IPA first reviewed and consolidated available MEL data. Because quantitative indicators varied across PoP programs, we grouped them under six 'classroom practices'—four reflecting adult supports that enable learning through play, and two focused on the planning that makes LtP possible. (see the PoP Classroom Practices and TPD Recommendations section). Since each implementing partner developed its own teacher LtP curriculum and instructional expectations, the framework enables the PoP initiative to summarize across programs in a way that meaningfully captures key instructional elements of LtP.





IPA then held multiple validation rounds, ensuring programs agreed on key findings and came to consensus over how to explain those findings. The most important round of validation occurred as a three-day community of practice workshop in which IPA presented the results from the independent analysis stage in order to guide groupinterpretation and reveal the extent that PoP programs arrived at similar findings. This process helped vet the quality and consistency of findings by identifying the strongest and most common recommendations which were also substantiated through quantitative

¹ Program evaluations can be obtained from individual PoP programs.





PoP recommendations for LtP design and implementation

The following recommendations sunthesize information from all three PoP programs. We've arrived at these recommendations following a cross-program analysis of learning assessment and class observation data. We've included those insights for which we found consensus across the PoP initiative.



While this document has been prepared to best capture where PoP programs found shared experiences, individual program findings and recommendations vary. Please consult program evaluations for more information on individual findings, and consider these recommendations in relation to the context in which you work.

Identify and strengthen foundational teaching skills that are required for teachers to effectively deliver LtP.

Quality LtP requires strong skills in lesson planning and in managing classrooms with high levels of child interaction. These foundational skills should be targeted and embedded into teacher training, because they can help teachers create more play-based learning experiences in their classes. Strengthening these competencies can also equip teachers to manage challenges that might otherwise discourage them from using playful methods. In contexts with large ECE class sizes, teacher guidance should be tailored to the unique challenges that teachers may face in planning and managing LtP for many children at the same time. Teacher success in foundational skills may prove crucial for ensuring they are willing and able to sustain LtP in the long term. For more information on foundational skills, see the TPD Guidance resource.

- Training improved LtP lesson planning practices, but teachers need ongoing support and deeper knowledge of ECE curriculum: PoP training provided support to teachers for lesson planning by providing guidance on using planning documents, supplying new templates with ECEappropriate fields, and practicing how to link activities to competencies. Programs addressed material gaps by training teachers to make their own play materials, involving children and families in sourcing local resources, and supporting advocacy with school leadership for materials and planning time. Teachers expressed appreciation for this guidance but also provided feedback that more support was needed, indicating that lesson planning for LtP was more time consuming and complex than before, requiring a greater knowledge of the existing curriculum and greater effort in finding and preparing materials. Feedback from program-supported teacher communities of practice (CoPs) and school-based coaching indicate that such forms of continuous professional development may be good spaces for supporting ongoing lesson planning needs.
- Integrated classroom management strategies supported LtP, but social interaction and learner autonomy in large classes remain challenging: PoP programs had most success where training integrated classroom management strategies within examples of play-based activities. For example, while modelling a construction activity, trainers first showed teachers how to break learners into small groups for collaborative building, rotate them, and finally, invite individual learners to verbally tell the class about what they'd built. This helped teachers facilitate LtP by allowing them to monitor a limited number of groups-rather than individuals-while maintaining high levels of participation and engagement. Nonetheless, class management challenges were reported as a 'pain point' due to the challenge of overseeing large classes at once, greater learner autonomy, and the need for children to selfregulate their behaviors and interactions during independent play. Small group and individual work arrangements were often perceived as challenges by teachers, rather than the solutions they were meant to be. Group work reduced the number of necessary play materials, but it also increased the challenge for children to share materials.

Ensure teachers and parents fully understand ECE goals according to the national curriculum, and how LtP can deliver those goals through principles aligned with theory on how young children learn.

PoP experiences suggest that building teacher and parent buy-in to LtP may require a stronger understanding of national ECE curriculum standards and how young children learn—alongside firsthand experiences that demonstrate learning does, in fact, happen through play. It may be useful to emphasize how holistic skills such as social, emotional, and executive function skills are strengthened by LtP approaches and shown to lead to academic success at primary levels. Where possible it would be advisable to start introducing LtP methods to early primary-level teachers to foster greater consistency across the education system, especially in the crucial transition from nursery to the first year of primary, even though it is outside the scope of ECE-focused programs and requires a longer horizon for change.

- PoP teachers showed improved understanding of ECE goals and age-appropriate activities following training familiarizing them with the **ECE curriculum and holistic skills development:** Training workshops were an effective PoP venue for increasing teacher familiarity with ECE standards, appropriate activities, and for clarifying that academic expectations for ECE learners differ from those at the primary level. They also emphasized that the curriculum mandates development of holistic skills - such as social, emotional, and executive function - that are wellsupported by LtP methods. This boosted teachers' understanding of which kinds of activities best support ECE learning and strengthened the case for LtP approaches. Workshop pre-post tests consistently showed these areas as strong gains in teacher learning.
- Deeply held beliefs refuting the link between play and learning persisted among teachers and parents: PoP programs sometimes struggled to completely dispel misconceptions about what ECE school-based learning should look like – particularly the belief that play is separate from learning and vice versa. This was in spite of learning assessments showing that LtP can deliver all needed skills, at least as well as existing methods. For example, teachers questioned whether play-based learning could build certain foundational skills like writing fluency, even though these were not always ECE learning

- standards. Parents were also observed applying pressure on teachers to teach to primary learning targets, demanding report cards, and sometimes expressing disbelief in play's potential to academically prepare children. Competing perspectives within the ECE system proved to have the potential to dissuade teachers from LtP, despite their understanding of ECE-appropriate learning.
- Teachers raised concerns for children transitioning from ECE LTP to primary methods, but opportunities exist to advocate for LtP across the system: Another concern that existed among PoP teachers was how ECE LtP learners would transition to the more teachercentered methods used at the primary level. While somewhat outside of PoP programs' control, multiple opportunities were found for influencing primary-level teaching. For example, shared continuous professional development engagements between primary and ECE teachers gave LtP-trained ECE teachers the chance to demonstrate play's effectiveness for engaging young learners at the primary-level too.

Strengthen buy-in to LtP by showcasing its visual, experiential, and intuitive appeal to ECE teachers and other stakeholders, while demonstrating its utility as a comprehensive teaching approach.

While teachers may initially view play in a classroom setting with doubt, early exposure to interactive demonstrations of LtP can help shift their perspective. Engaging teachers as participants increases the chances they will experience play positively and see its value for engaging young children in meaningful and accessible learning. Where teachers have had less formal teacher-training, it may be effective to present LtP as a comprehensive methodology that cross-cuts numerous instructional elements, as these teachers are likely to be receptive to approaches which add structure to their teaching. These methods were also used successfully with district officials, school leadership, and communities.

Successes and challenges from PoP programs:

- Playful, immersive training built teacher confidence in LtP by modeling how learning takes place: PoP programs found great success in gaining teacher buy-in through immersive trainings that used an 'LtP-for-adults' approach, engaging teachers as participants in LtP, and directly demonstrating to teachers how plauful approaches enhance both learning and engagement. Such experiences profoundly shaped teachers' perceptions of LtP's potential and increased their willingness to try these methods in their own classrooms. Training relied primarily on modelling strong LtP activities and engaging teachers interactively through playful methods, by simulating teachers as learners, and explaining how playful learning strategies lead to learning and engagement in the classroom. For more information on this approach, see the Quick Wins for Playful Learning resource.
- Framing LtP as a comprehensive approach helped teachers with little formal training background embrace it as age-appropriate and practical: PoP programs positioned LtP as a comprehensive methodology, which resonated among ECE teachers who had little formal training and lacked a structured approach to designing learning experiences, making them more receptive to a well-defined framework. This meant presenting more than just LtP activities, but also sufficient content on developmental and learning sciences, lesson planning, class management, facilitation, and assessment approaches that support play-based methods. In particular, teachers mentioned child development principles as highly convincing and saw LtP as intuitively age-appropriate for engaging young children.

Provide plenty of hands-on training for aspects of play facilitation which are most novel to teachers, knowing that those which are already familiar will be easier for them to implement.

A first step in designing LtP teacher training is to understand which practices teachers are already using in ECE classrooms. LtP practices that build on these existing routines may require less training focus, since they are easier for teachers to adopt and are already generally accepted in schools. Novel practices which occur rarely in the context will require more time to build and should have heavier focus during training engagements. Heavy modelling and hands-on practice are musts, and teachers will likely need help identifying when and where they can use them. Programs may need to modify how teachers are expected to conduct certain practices where schooling culture makes a practice less acceptable. For more information on hands-on approaches, see the TPD Guidance resource.



Successes and challenges from PoP programs:

- PoP improved overall teaching quality, building on familiar ECE practices helping teachers shift toward child-centered learning: PoP programs successfully built on teachers' strong preexisting use of objects as visual aids and physical movement such as song and dance. Training aimed to shift such practices towards more child-led interactions by modelling and giving teachers chances to practice giving children more participation and independence in doing those already-existing elements. Improvements were observed in the frequency of hands-on exploration of play materials, choice-making, and small group interactions. Ultimately, this resulted in a shift toward child-centered learning, away from the previously popular chorus and teacherled methods of instruction.
- Completely new practices were harder to strengthen, and often more complex than previous methods: While the overall quality of teaching and learning environments improved in all cases, PoP programs were not able to achieve sufficient quality in all LtP practices. Challenging practices included providing openended exploration, leveraging social connection for learning, and giving opportunities for individualization. Since these practices were rarely observed before PoP programming, training required enhanced modelling of how to do them

- and more hands-on practice for teachers. In some cases, practices misaligned with already existing classroom practices, norms, and culture, such as certain behaviors for learner agency. Such practices also required a greater knowledge base and more sophisticated skill, supporting the use of step-by-step, explicit, and hands-on practice. In the end, teachers made smaller improvements in such new practices, struggling to hand children genuine ownership over their learning.
- Knowing when and how to apply them helped teachers adopt new instructional practices: The greatest success was found for new practices where programs helped teachers identify when and where new practices could be implemented within a lesson, and follow up with chances to explicitly practice those skills while leading playful activities. For example, in demonstrating a play activity meant to develop learner expression, teachers were shown how to break children into groups to support conversation, and then pose an open-ended task by prompting children to retell what their peers had said. In some cases, such as the example above, PoP programs also believe the concrete link between the task and the learning objectives helped teachers understand how to pose open-ended prompts.

Ensure that key ECE competencies are addressed by a variety of play activities that directly develop their associated skills

While play activities can develop multiple learner competencies at the same time, it may be useful to ensure that key curriculum skills are identified and addressed through a collection of play activities which task children to practice those skills. A direct link between the kinds of activities provided to teachers in a training program and the specific skills developed by learners is inconclusive, but programs should nonetheless ensure a sufficient variety of play activities are presented so that teachers understand how to concretely meet a range of curriculum skills through play.

- The learning competencies associated with specific play activities may help explain skill gains: PoP programs identified some learning gains in skills that seemed to be tied to the LtP approaches shared with their teachers. In those cases, program staff pointed to collections of play activities that were highly associated with the learned skill as an explanation for why children showed improvements in those specific skills. For example, where letter identification skills increased, trainers had shown teachers how
- to build alphabet cards, modelled using them in numerous seek-and-find games, and observed teachers using those activities successfully in their classrooms. The table provides examples where program teams linked collections of activities to specific learning gains.
- No clear link between specific instructional practices and learner skill gains: Specific instructional practices (e.g. group work or physical exploration) had little clear relation to measured





learning. This is at least in part because it is more difficult to link a teacher's instructional moves to a specific learning outcome, and because instructional moves affect learning more generally across a range of learning outcomes. PoP programs' inability to link instructional practices to learning doesn't suggest that teacher practices are unimportant; variation in the success observed across teachers using the same play activities was often explained by their ability to skillfully plan for and facilitate those activities.

helped connect play to competencies: PoP programs' experiences suggest lesson planning and facilitating cognitive exploration through open-ended prompts may be key for making learning come to fruition. In both cases, these practices help connect physical activity to the desired learner competencies, by supporting the teacher to guide activities in ways that promote meaningful learning for learners. These are also important for intentionally planning the multiple and holistic competencies that may be practiced through an activity, and bringing attention to those skills during the lesson in order to ensure they are developed.

Program	Play activities	Learning gain
TMR Rwanda	Collection of seek-and-find games using teacher-made alphabet cards	Letter Identification**
TMR Rwanda	Collection of activities utilizing counting-objects to support counting and manipulation of quantities	1-to-1 correspondence* Simple operations**
IT'S PLAY Zambia	Collection of activities featuring discussion and retelling about certain ECE themes; children first talk in small groups and then share ideas to others	Expressive vocabulary** Listening comprehension**

^{*} Approaching significance; **Significant at the 0.05 level

Assess learning outcomes after teachers have had enough time to master LtP methods, while also tracking early signs of learner engagement to guide ongoing program improvements

It may not be reasonable to expect learning to be improved in the first year during which teachers are initially trained on LtP methods. This is especially true where LtP represents a large change from existing methods, because teachers need time to experiment and improve their ability to apply LtP. In the early stages, it can be helpful to track learners' reactions to and experiences with LtP, data that can help programs to gauge progress and make timely adjustments. These indicators may include learner engagement, participation in activities and interest in classroom learning.

- Instructional shifts take time to transpire: PoP programs conducted evaluations of learning in the same year as training teachers. This meant that teachers were expected to learn new methods and shift classroom practices quickly enough to impact learning outcomes before the end of the school year. On reflection, instructional changes were likely too complex in nature, and a transition year for teachers may be needed to allow them to improve their skill applying LtP.
- No loss in learning during the transition to LtP—with potential for future gains as mastery over LtP deepens: Learning outcomes for children in LtP classrooms were equivalent to those in classrooms using already existing methods, as measured in the transition year during which teachers were first trained by PoP programs. This shows that teachers can transition to LtP without negatively impacting learning. However, no overall learning.





ning improvements were measured. Some isolated skills showed both improvement and underperformance relative to control groups. There are no indications that LtP is less effective for developing certain learner competencies, including writing, for which doubts were occasionally voiced by teachers. In the long-run, the continued mastery of LtP methods observed in PoP classes—and their overall gain in teaching quality—has the potential to provide a higher ceiling for learning.

Learner experience improved under LtP, even where learning gains were modest: Where learner experience of LtP was measured, PoP programs found positive results. Specifically, learners' literacy interest in one PoP program was found to improve across all indicators relative to a control group. Specific experiential indicators may include levels of learner engagement, participation in activities, and interest in classroom learning.

Adapt programming to local needs and structures, while advocating for sustained teacher support from system actors, and assisting teachers to cope with time demands from the outset

LtP programs must adapt to local contexts, helping teachers take on new responsibilities in culturally feasible ways. Aligning new expectations with existing teaching tools and guidelines is a start to reducing the burden on teachers implementing LtP. Sustained improvements in teaching environments can benefit from continued advocacy with national and local stakeholders to improve school conditions—such as class size, training, supportive leadership, and materials—as well as greater parental involvement and ECE/LtP integration in national policy and curriculum. Finally, early implementation is time-intensive for teachers due to knowledge and resource gaps. Programs should plan support for lesson planning, sourcing or creating play materials, and strategies that make these tasks more manageable.

- PoP programs all made gains through advocacy with stakeholders that better enabled teachers to implement LtP: At the national level, programs were able to bring technical inputs and child development research into the review of teacher guidelines and curriculum, helping to further institutionalize playful methodologies at the ECE level. Important district level activities included accompanying officials during teacher training workshops or school visits to build LtP understanding, rendering classroom observation tools more age-appropriate for ECE learning, and identifying opportunities to budget or administrate for LtP needs, such as ECE-specific teacher training or provision of play materials. In communities, partners leveraged parents to help supply locally-available resources and built understanding of how play is developmentally appropriate for ECE learning.
- Programs struggled to ease teachers' time and effort demands when gaps in knowledge and classroom materials remained: PoP's resource and training-constrained environments meant programs had to spend extensive time devising and testing strategies to equip teachers in the face of such limitations. This included developing numerous teaching pre-requisite skills, such as lesson planning and class management. Programs

- linked new tools to existing frameworks, but this was often less helpful than anticipated because teachers were so often unfamiliar with those resources. High learner-to-teacher ratios and few material resources meant teachers had to either repurpose locally available materials for play activities or make materials themselves. All these challenges resulted in heavy time commitments for teachers trying LtP; although this improved with time as teachers became more proficient, there was great burden at the beginning, prompting the need to proactively plan for how those inputs can be supplied.
- Certain teaching strategies may require more Iteration and prototyping to contextualize methods to local culture and customs: In the PoP context, some aspects of child agency, ownership over learning, and peer-interactions were not seen as appropriate for young learners in Zambia, Rwanda and Uganda. Programs found that their suggested strategies were infeasible, with teachers unwilling to implement them, which could have benefitted from earlier identification. In some cases, programs were able to find workarounds that were locally-acceptable. For instance, programs shifted away from allowing free movement between activities, and instead gave children the choice to choose their first activity, followed-up by teachers rotating children through the remaining stations.





Measure whether the key expected LtP classroom practices are being implemented by teachers, and use this data to inform training content and what teachers are asked to do

Class observation data provided some of the most useful information for improving PoP programs by highlighting where practices and behaviors were on track and not. Program staff and qualitative data from stakeholders complemented the observation data by informing strategies to promote LtP in real classrooms. When certain practices are absent, consider whether they need to be better contextualized to fit the setting, or if the measurement approach needs to be adjusted. See the Classroom Observation resource for more details on using observation for monitoring and program learning.

PoP programs agreed that early reflection on what behaviors were realistic and desirable could have rendered certain data more useful for program iteration. The following describes indicators that could have been improved for stronger program learning:

Agency and social connection: PoP programs agreed that some global practices pertaining to child agency and social connection were not feasible in PoP contexts. For example, in Rwanda it would not be considered acceptable for children to move around the class or exercise free choice without asking for permission from the teacher. Additionally large class sizes put practical limits on some personalization practices.

Suggested Action: Adapt measurement tools so that more reasonable forms of agency and social connection are captured, because this will more accurately capture when teachers make changes (and avoid 'floor effects' where the practice is rarely observed).

Class management and emotional climate: PoP programs struggled to interpret class management data, because tools focused on teacher actions only without providing the overall level of engagement and whether the teacher had already established strong class norms. This made it difficult to determine whether decreases in 'positive discipline' reflected weaker classroom management, or simply greater student engagement that reduced the need for it.

Suggested Action: Consider varied sources of data that can help interpret why class management behaviors may be changing, such as,

- · Class size and age levels represented
- Levels of learner engagement and participation in the activity
- Teacher questionnaire pertaining to how class norms are being developed over the course of the school year
- Qualitative insights from teachers on managing classroom behavior

Lesson planning: Class observations by definition do not cover a teacher's lesson planning process, but this behavior is crucial to effectively implementing LtP.

Suggested Action: Consider adding complementary data to a class observation. For example, ask the

teacher for the lesson's plan, and then identify whether key elements of LtP lessons have been planned and whether the activity is shown to address certain target learning outcomes.

Free play, guided play, and direct instruction:

Some programs may find it important to not just increase the opportunities for play during lessons, but throughout the day. Class observations are less likely to capture free play periods or even corner/group activities, since teachers may be inclined to use 'lesson time' for direct instruction and guided play opportunities.

Suggested Action: An important consideration for program learning is consistently measuring play opportunities; settle on program expectations for the ideal range of play opportunities, develop a consistent definition for 'free play', and determine when play may happen throughout the day. It is likely that programs will need to leverage surveys or interviews to better learn about play opportunities throughout the day.

Inclusion: PoP programs faced challenges creating useful inclusion data. At the ECE level, many children with disabilities have not yet been diagnosed because disability can be difficult to identify, awareness of disabilities may be low in a given context, and inclusive strategies may be highly specific to individual children. At the same time, disabilities may not be known by external observers observing the classroom. One PoP program was successful in collecting gender inclusion data through monitoring observations by defining a few specific actions a teacher might use generally across the whole classroom.

Suggested Action: For disability, smaller scale qualitative data, such as teacher interviews or surveys, may be more effective for learning about what teachers are trying, and what challenges remain. In some cases, it may be able to define a concrete set of practices that can be applied to the whole-class, and therefore observed quantitatively across many classes.





PoP Classroom Practices and TPD Recommendations

This section documents the extent to which PoP programs observed changes in instructional practices within ECE classrooms. Findings are derived primarily from class observations and teacher feedback. Programmatic focus and expectations for how teachers apply LtP in classrooms were not identical across PoP programs, however the findings, challenges, and opportunities presented in this section were found to be largely shared, unless otherwise stated.

The practices presented are framed around four common 'supports' to playful learning: exploration², learner agency, social connection, and positive emotional climate. Additionally, PoP identified two linked practices as especially important for enabling play: classroom materials for activities and lesson planning for LtP.



While this document has been prepared to best capture where PoP programs found shared experiences, individual program findings and recommendations vary. Please consult program evaluations for more information on individual findings, and consider these recommendations in relation to the context in which you work.



Each program developed its own approach to LtP—shaped by context, design choices, and implementation realities—and did not necessarily aim to influence the specific practices presented in this section. The framework of practices is intended to support cross-program learning rather than to standardize or assess program strategies.

Instructional supports to playful learning

Planning for play

Physical and Cognitive exploration²



Personalization and ownership



Play-enabling Class Materials and set-up



Social connection



Class management and emotional climate



Lesson planning for LtP



² The ENGAGE tool does not treat cognitive and physical exploration as distinct categories, as the two are meant to occur simultaneously. However, PoP projects observed differing outcomes, enablers, and constraints between practices that supported hands-on physical interaction and those that prompted cognitive engagement and expression. For this reason, we address them separately.







Teachers design activities that engage children in 'learning by doing' through movement, object manipulation, and interactive representations of lesson concepts. This is a highly visual, concrete, and observable practice.

Recommendations:

Provide teachers with a wide variety of example activities that encourage a shift towards child-led learning that they can replicate in their classroom. During training, demonstrate activities that can be done using just a few common materials to encourage resource flexibility. Continuously connect the physical interaction in activities to specific ECE themes or competencies to promote strong instructional focus on learning.

What PoP did:

All PoP programs heavily emphasized getting teachers to shift from teacher-led classroom activity to handson learning-by-doing. Workshops introduced new activities to expand teachers' playful repertoire and provided supporting LtP theory on the importance of concrete active learning for the ECE level. For example, one of a program's 5 Tips for play was "Hands-on Minds-on" highlighting the link between active learning and cognition. Programs supplied printed guides to help teachers with new activities, and shared ideas for creating play materials to complement those activities.

Observed changes:

We found sizeable changes in the amount of physical exploration activities as teachers shifted from previous movement activities to hands-on interaction with play materials, showcasing more child-centered practices, including:

- More diverse interactive and hands-on activities
- Greater learner-control over the activity's physical tasks, usually meaning less copying or choral activities
- Use of more learning materials so all children can participate in the doing
- More intentional links between the activity's task and the ECE learning theme it was meant to develop

Teacher feedback:

Teachers were generally enthusiastic about the interactive nature of plauful activities, noting that physical activity helped boost learner participation. This was an easy concept to promote, especially in classrooms where objects were already part of routines. The tangible and visual nature of this practice made it easier to demonstrate to teachers and for coaches and mentors to observe during class visits, building on the movement-activities already present in PoP classrooms.

Areas for improvement:

PoP programs found it more challenging to support a genuine release of control during exploration activities. For example, group work often involved all groups doing the same activity, with the teacher leading instructions; while this increased participation, it did not necessarily give children ownership over their own learning nor freedom to explore. Teachers also had a habit of focusing on the physical or kinetic aspects of activities, but less so on the resulting cognition and their role prompting 'minds-on' learning.

Key contributors

- Model verbal expression tasks around contentarea learning and ECE Themes
- Demonstrate class management strategies for facilitating child-led expression of learning

- Difficulty making it appropriate for the youngest
- Teacher understanding of open-ended questions
- Coaches often unable to provide guidance because of the novelty of the practice
- Doubts about young children having opinions







Teachers create cognitively interactive lessons by guiding child-led thinking and expression through strategies like open-ended questioning, real-world connections, reasoning, imagination, and opinion-sharing.

Recommendations:

Package new play activities with clear learning objectives and ready-to-use questions that support exploration and expression. Strengthen links to ECE learning goals—for example, by encouraging real-world connections or subject-specific activities that make this practice more tangible and show how children might be prompted to think or express ideas. Shift teacher attitudes that learners are too young to have their own unique opinions. Raise the profile of this relatively new practice to ensure it gets the attention it needs.

What PoP did:

All programs tried to leverage ECE curricular themes, and other locally relevant aspects, like storytelling, in order to ground play activities in real-life experiences and promote expression about those things. The use of local materials was meant to strengthen this connection. One program dedicated a written resource on open-ended questioning in order to strengthen teacher skills, while another held a refresher workshop specifically on the practice.

Observed changes:

Few changes were observed, with teachers often failing to actively guide learning while children were engaged in play. When they did, teachers tended to check comprehension with closed questions, as opposed to fostering exploration or the expression of

unique ideas. However, success in this practice was seen in one PoP program. Underpinning this program's approach was:

- Literacy specific LtP. All new activities focused on a specific literacy area, such as phonemic awareness or prewriting, and helped clarify the learning objective that should be cognitively explored. For example, when focusing on expression, trainers showed how to create opportunities for open-ended peer conversations and shared prompts to help learners retell or summarise what others had said.
- 2. Embedded management strategies within the activity that supported cognition and expression. The program demonstrated class management strategies as part of play activities, and gave teachers practice in enacting them. In practice this often involved showing teachers how to set up groups, select appropriately-leveled activities for group work, and rotate learners to give opportunities to practice the subject-specific learning.

Teacher feedback:

Teachers listed some challenges in implementing this practice. Time constraints were frequently cited as a reason for cutting expression tasks. Teachers also found questioning strategies less feasible with their youngest learners, or outright believed children to be too young to have unique opinions.

Areas for improvement:

Leveraging real-life connection is one area where programs might make more growth. In many classes, teachers were already making such connections before PoP. Success might be found in providing teachers effective questioning strategies to get children to discuss the ECE theme, reason, or share opinions.

Key contributors

- Model verbal expression tasks around content-area learning and ECE Themes
- Demonstrate class management strategies for facilitating child-led expression of learning

- Difficulty making it appropriate for the youngest
- Teacher understanding of open-ended guestions
- Coaches often unable to provide guidance because of the novelty of the practice
- Doubts about young children having opinions







Personalization and Sharing Ownership Over Learning

Definition:

Teachers give learners a level of choice and influence over the learning process. Strategies range from individualized instruction, promoting independence doing the activity, choices about materials or activities, and opportunities for free play.

Recommendations:

Support teachers to understand why learner agency is relevant for them and how it can enhance teaching and child learning, and follow up with feasible practical guides for implementing it in large classes. Help teachers identify periods in the ECE daily schedule and moments within lessons when more choice can be given to learners. Strategies for applying choice to the whole class may be more feasible in large classes where teachers can't give individual attention to learners.

What PoP did:

PoP combined advocacy for child-centered learning and the exploration of opportunities for learner agency throughout the ECE day. One program promoted this through coaches helping teachers to identify practical moments for offering choice at the beginning of an activity and giving feedback on providing sufficient time to children to try on their own. Another program took a different approach by focusing on the ECE timetable and identifying periods to implement free play, as nationally-mandated, within the daily schedule.

Observed changes:

Growth in this practice was observed despite this being a relatively new and unobserved practice in traditional teaching methods. Teachers made an effort to give children more independence, but large class

size, limited materials, physical space -all of which are essential for granting more control to children-likely constrained teachers. As a result, some practices were scrapped, as they couldn't be applied effectively in a whole-class setting.

Practices seen to improve:

- Setting up and facilitating individual work
- Encouraging all children to try on their own
- Children choosing their first activity before being rotated through others
- Routine periods of day for whole-class free play

Practices that often did not improve:

- Giving chances to share individual opinions / ideas
- Individualizing feedback
- Using child ideas in the lesson
- Multiple activities at same time

Teacher feedback:

Responses were mixed, with teachers both recognizing the learning benefits of personalization, and reporting trouble finding time to incorporate it. Teachers are open to adding more personalization but need guidance on how and when to do so.

Areas for improvement:

Aside from material constraints, more buy-in to genuinely giving choice and ownership over learning can be achieved. The intent behind personalization can sometimes be lost with teachers seeing it as a way to increase enjoyment, but not necessarily for learning.

Key contributors

- Leveraging ECE teaching expectations for free play, corners, and child-centered learning
- Practical mentorship with teachers to identify opportunities within existing practices
- Teacher creativity in planning choice / a variety of activities or materials

- Resource constraints to giving multiple choices and independent working areas
- Not enough teaching time to give individualized attention to all children in large classes
- Demand on teachers to identify individual needs







Teachers foster peer-interactions and leverage personal experiences for learning through the use of group work, peer-shared ideas, links between learner backgrounds or experiences, etc.

Recommendations:

During training, give teachers hands-on practice in setting up group work, including strategies for managing large classes. Emphasize how group activities not only support classroom management but also promote social interaction, which in turn enhances learning. Demonstrate ways to support peer conversations and apply personal experiences to lessons, through questioning, linking play activity to concrete ECE themes, and giving opportunities for learners to share their personal experiences which relate to the lesson.

What PoP did:

More than any other practice, social interactivity required teachers to refine their class management skills. Because so many teachers faced class size concerns, group work was frequently discussed as a class management technique for helping manage large numbers rather than used to leverage social interaction for learning.

Observed changes:

With little preexisting use of group work, teachers made only small gains in this area, except for one program which had large gains linked to its direct program support to setting up and rotating groups. While groups sometimes helped manage large classes and gave opportunities for physical social interactions, they sometimes contributed to disorder rather than boosting discussion or peer connection.

Teacher feedback:

Inability to use group work (and ultimately divide up large classes) was often seen as a point of frustration, but a potential enabler to facilitate play. In some isolated cases, teachers reported success having children work together as a class management strategy.

Areas for improvement:

More can be done to frame social interactions as a support to learning rather than merely a class management strategy. Group work was often discussed in the context of large class sizes, giving reason for this misconception. Greater emphasis could have been placed on how social interaction enhances learning. Additionally, it may be relevant to better equip teachers for setting class norms that guide how children act while working in groups.

Key contributors

- Class management skills for setting up groups and rotating children
- Careful activity selection, at the right level so they can be done independently by all children in a group

- Preference for whole-class activities
- Challenges managing behaviors while children interact in groups
- Mixed-age classes less likely to do groups
- Distrust of children learning by themselves







Teachers demonstrate strategies to manage class behaviors during play, while maintaining a positive class emotional environment. Specific practices include setting clear expectations for child-led play, using positive discipline techniques, creating low-risk supportive environments etc.

Recommendations:

Reflect early on strategies teachers will need to manage play activities, and tailor class management training to work for use in large classes. Teachers with few materials will likely need stronger management skills as children share materials. Fostering a positive emotional climate and reducing corporal punishment are important, but procedural strategies — like establishing group norms for how to use materials, and do independent activities — might be prioritized early on. Help teachers get learners to take control over small management tasks, turning play from a management liability to a solution. Model playful strategies intentionally to give teachers a clear, practical vision of effective management.

What PoP did:

All PoP programs addressed classroom management strategies, often emphasizing the creation of lowrisk, fun, and empowering class environments. Other strategies included establishing routines and daily schedules to clearly define periods for learners to play. Programs also promoted group and individual class arrangements to help shift away from teacherled and whole-class activities, often overlapping with principles on learner agency and social connection. Class management was also a frequent coaching topic, though it is unclear if the guidance provided was consistent with play-based approaches or conducive to their effective use.

Key contributors

- Learner agency can be strengthened to help manage some elements of class work
- Modify the rules and roles of participation for children with disabilities
- Use local materials that can be found in large numbers so that all children can participate
- Skill in managing key class procedures

Observed changes:

The changes in this practice remain unclear. Data suggests LtP has the potential to improve class management through higher levels of engagement, or hinder class management due to challenges managing increased learner interactions. The use of groups and individual work increased, but was paired with reports of challenges implementing such arrangements. Some data shows teachers demonstrating fewer positive discipline actions relative to control groups, but the reason why is unclear. The biggest improvements were seen where class management strategies were embedded within play activity examples, with trainers demonstrating strategies and providing hands-on practice for teachers.

Teacher feedback:

Teachers commonly reported that increasing levels of learner interaction made class management more difficult, but that play put children in a relaxed, learning-friendly state reflecting an improvement to the classroom's emotional climate. Critical comments often highlighted the challenges of integrating play materials into lessons with large classes, especially when learners had to share. In some isolated cases, teachers reported that giving learners class management roles improved class order.

Areas for improvement:

Feedback indicates that teachers need more support in managing LtP. It was assumed that strategies for group work and learner agency would enhance play in large classes, but feedback suggests the opposite. Mixed ages and play materials caused problems for managing behaviors during activities. Overall, there is a need to provide more practical procedural guidance so that teachers can set routines, build behavioral norms for how learners act during activities, and subdivide large classes to simplify the teachers' challenges of monitoring during exploration.

- Big changes needed from existing practices
- Too few materials vs class size
- Implementation challenges may discourage teachers from using play
- Some cultural beliefs about punishment







Teachers arrange the room in a way that is conducive to playful activity, creating spaces for group work, equipping the room with child-accessible play materials, and using materials to support independent learning.

Recommendations:

Build relationships at the school level, particularly with head teachers, to ensure the material needs of play are clearly understood and met. Maintain a strong focus on empowering teachers to create their own materials because this will enable hands-on activity. To balance the burden of creating new materials for every activity, encourage flexibly using a smaller number of materials, and the use of easy-to-find local materials. Help teachers stock classroom corners so learners can more easily access materials and support them independently doing activities.

What PoP did:

PoP heavily focused on improving local provision of materials. This meant prioritizing simple teacher produced materials, easy-to-find objects like sticks, or materials supplied by parents. PoP programs demonstrated building materials during training and gave instructional booklets on making other plau materials. Engaging the head teacher helped support teachers, while involving parents in school-facilitated meetings leveraged them for additional materials. To address material use, PoP programs linked child development research on concrete learning to the importance of allowing all children to do hands-on learning, helped teachers set-up learning corners with sufficient materials, and demonstrated how materials can improve learning across a variety of lessons including using the same materials in a versatile way to support learning objectives.

Observed changes:

The supply of play materials grew throughout PoP programming, along with improvements in how these materials were stored to support free play, corner play, and small group lesson activities. The local-materials approach boosted teacher motivation to source the materials themselves, although it highlighted that sometimes manufactured goods like colors and paper were necessary to build new play materials. Sourcing more materials for play was observed to be essential for the changes observed in physical exploration. Teachers were frequently observed making materials together during teacher Communities of Practice.

Teacher feedback:

Teachers appreciated the expansion of play materials to support play activities, but several challenges remain in maximizing their use. A key issue is the insufficient and varied supply, which complicates the management of play activities, particularly in large classes. Other concerns include the quality, variety, and storage of materials. While the ability to build materials is empowering and a step towards adopting new methods, it can also place a heavy burden on teachers who are tasked with constructing numerous new materials. Teachers often found they could not build all the necessary resources, highlighting the continued need for manufactured items like paper and colors.

Areas for improvement:

More strategies can be considered for how to make material provision sustainable through approaches such as pooled ownership over materials at the school, better storage, and more clear guides for how parents can contribute in the long term. This would help address the heavy time commitment needed from teachers.

Key contributors

- Learning how to construct play materials using readily available materials
- School-led meetings and communications with parents to source useful materials
- Teacher Community of Practice time for building materials together
- Activity examples featuring plenty of object use

- Building lots of new materials takes time
- Lack of storage for new TLMs
- Unavailability of manufactured goods
- Large classes require more materials







Enable effective playful learning by targeting learner competencies for development, selecting engaging activities, sourcing play materials, and pre-planning questions for children to stimulate cognition.

Recommendations:

Prioritize lesson planning as a key training focus, and make sure teachers incorporate LtP practices into those plans, like when group work will be used or writing open-ended questions for exploration. Planning can directly enhance other practices by explicitly outlining how they will be implemented, rather than leaving them to chance. Help teachers be efficient by leveraging school-based resources, like mentors, as teachers will need practical support and help brainstorming ideas. Build familiarity with existing ECE frameworks and curriculum so teachers can better link play to national standards, and give practice using all the planning documents together to limit the time needed to navigate numerous resources.

What PoP did:

Training was a key opportunity for supplementing skills related to planning. PoP programs aimed to inspire new activity ideas, offer opportunities to practice linking lessons to ECE themes, and ensure teachers understood existing planning guides. One program introduced a new lesson template with fields for materials as a prompt for including them in lessons, and a week-long planning approach to improve efficiency. Activity booklets were provided to help teachers look up new playful activity ideas.

Observed changes:

We observed teachers improve lesson planning with better targeted competencies and ECE themes, but this came with increased time for planning, often allocated to building or finding play materials. School TPD spaces, like teacher Communities of Practices (also known as peer learning circles), emerged as a high-potential platform for seeking help for and sharing new planning ideas or materials.

Teacher feedback:

Teacher feedback indicates that progress has been made in identifying opportunities for incorporating play within national curricula and knowledge of new activities. However, teachers report needing more help selecting play activities and play materials that meet learning goals. Teacher accounts also highlight a potential challenge to the sustainability of lesson planning practices, as planning for play takes significantly more time than before. Planning skills improve over time, with teachers recognizing this as a crucial factor that can enable play. In some cases, headteachers were said to deny teachers planning time.

Areas for improvement:

Continued exposure and peer exchange can help teachers to master the art of selecting activities and materials to meet target learning standards. This can be helped along by supplementing teacher knowledge of the existing ECE curriculum wherever possible. While teachers will become more efficient with practice, mentorship to support teachers navigating between new and existing frameworks and planning tools can help reduce the early planning burden on teachers.

Key contributors

- Knowledge of ECE curriculum
- Repertoire of playful activities
- Creativity in using learning materials and activities to address specific learning outcomes
- School TPD spaces for seeking help

- No training on national planning guides / tools
- Time available for planning and making materials
- **&** Loss of planning time to teacher shortages
- Lack of flexibility in repurposing playful activities to apply to other learning objectives





Taking a Learning Approach



Successes and growth opportunities from PoP are actionable learning for future LtP implementers

PoP programs faced the challenge of applying play-based learning in settings where the methodology was either entirely new to teachers or not yet developed as a practical approach. Programs worked across multiple levels of the education system, engaging a range of stakeholders—a strategy seen as necessary for sustainable change, but one that introduced uncertainty about which approaches would be effective and why. The mixed success of PoP in strengthening classroom instruction and promoting child development highlights the need for continued learning about how to implement LtP effectively in practice.

Future programs can build on the history of play-based learning to identify key challenges and solutions, drawing from past efforts to enhance effectiveness. PoP programs have embraced a learning-centered approach, openly sharing successes and growth areas from innovative LtP models to contribute to the body of evidence. PoP partners hope these learnings offer actionable insights and design recommendations to help LtP implementers maximize their teacher professional development activities.

Resource Package

This Synthesis is one part of a larger package of knowledge products produced by the PoP project. Based on four years of implementation experience, this package offers key recommendations and guidance for those implementing—or considering implementing—ECE and LtP programs. We invite you to explore these resources and join us in bringing the LtP vision to life! Other resources include:

- Getting Started with Playful Learning: 'Quick Wins' for Teachers
- Building play-based learning capacity among teachers: A Play Our Part guide on ECE teacher professional development
- Pre-Post Training Tests: A Play Our Part CoP guide on designing pre-post tests
- Class observation: A Play Our Part CoP guide on using class observation to improve a program
- Early-Stage Program Learning to Improve Learning through Play Pedagogies
- Effective government engagement strategies: Insights from the Play Our Part Community of Practice









The **LEGO** Foundation



