



Developing a Low-Resource, Evidence-Based Early Years Professional Development Programme Using Self-Assessment

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Abstract

Early language and communication skills are critical for children’s development and early years educators are well-placed to support children’s learning; however, many early years educators receive little training to support the development of these skills. While professional development programmes offer a potential solution, existing programmes have yielded mixed findings, and little is known about why this is the case since most programmes do not describe their intended mechanisms of change. Moreover, most programmes require abundant resources, leading to limited sustainability and scalability. This paper presents a theoretical framework for a low-resource professional development programme aimed at enhancing educators’ abilities to support preschool children’s language and communication skills. We identify core characteristics (sustained, multi-format, flexible, context-sensitive, focused) and active components (coaching, practice, feedback, reflection, goal setting, modelling, group engagement) of effective professional development programmes, which we use to inform the programme design. The proposed programme integrates three main components: (1) LangQuest, a free, downloadable self-assessment tool designed to help educators reflect on their language-supporting strategies, (2) an online course that promotes meaningful use of the LangQuest and builds educators’ knowledge of how and when to use different pedagogical strategies, and (3) Learning Circles, a form of professional learning communities to promote social learning. We envision that this programme will enhance educators’ procedural knowledge of language-supporting strategies and improve teacher-child interactions, ultimately fostering children’s language and communication skills. By identifying features of effective early years programmes, the paper provides a practical roadmap to those interested in developing PD programmes or integrating the LangQuest into existing programmes.

Keywords Professional development · Language · Early childhood · Self-assessment · Theoretical framework · LangQuest

Advancing language and communication skills in young children is a universal goal of early education, as these foundational abilities are critical for later academic success and social development (Blases et al., 2016; Schoon et al., 2010; Snow, 2016). However, many early childhood education (ECE) programs worldwide face significant resource constraints, including limited access to materials, training, and support (Alexiadou & Altmann, 2020; Rao & Sun, 2015; UNICEF, 2023). Moreover, impactful professional development (PD) opportunities are limited, with many inaccessible due to cost or time constraints. This paper introduces a free,

evidence-based PD programme designed to address these gaps by enhancing preschool teachers’ pedagogical knowledge and improving teacher-child interactions through a self-assessment approach. By focusing on sustainability and scalability, we propose a programme that provides an accessible solution for improving language and communication outcomes, especially in under-resourced settings.

Children with stronger early language skills are better equipped to navigate the academic and social demands of school, and disparities in these skills are strongly associated with socioeconomic factors, often leading to long-term inequalities in educational outcomes (Fernald et al., 2013; Hoff, 2013; Law et al., 2019). Early childhood educators play a pivotal role in fostering children’s development, as supported through multiple theoretical perspectives. From a Vygotskian perspective, child development is primarily

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shaped by social interactions. Bronfenbrenner's ecological systems theory further emphasises that consistent and high-quality interactions, termed as 'proximal processes', as drivers of optimal development. Bandura's social learning theory underscores the role of educators as models, demonstrating effective behaviours that children observe, imitate, and internalise. The importance of educators on children's language and communication skills has been supported by numerous studies (e.g., Slot et al., 2018; Schachter et al., 2016; Ulferts et al., 2019), with the quality of teacher-child interactions significantly impacting language outcomes (Cabell et al., 2015; Curby et al., 2009). Educators' use of language-supporting practices—such as modelling language, engaging in responsive interactions, and creating linguistically rich environments—has also been shown to impact children's language growth (Rowe & Snow, 2020). Moreover, research has shown that 'pedagogical knowledge' (knowledge-in-action) about language-supporting strategies is related to child outcomes (Mathers et al., 2022). While the ability to communicate effectively with children is an essential attribute of the most expert early years educators, many lack the specific training needed to deliver high-quality language interactions consistently (Dockrell et al., 2017; Friedman-Krauss et al., 2022), with studies reporting limited use of the language-supporting strategies, especially in disadvantaged areas (Phillips et al., 2018).

PD programmes offer a promising avenue to address gaps in educator training, with studies finding improvements in classroom quality (Egert et al., 2018) and children's outcomes, including their language skills (Markussen-Brown et al., 2017; Zaslow et al., 2010). However, the result is not always consistent, with some studies finding minimal impact on educators' practices (Piasta et al., 2020) and, more often, no impact on children's outcomes (Chaitow et al., 2023; Piasta et al., 2020). It is unclear why some programmes work and others don't, since most programmes do not provide enough information on their intended mechanism (Gupta & Daniels, 2012), often lacking a theoretical framework or under-theorising the change processes taking place (Elek et al., 2024; Schachter, 2015). Indeed, many programmes detail the process of their evaluation but not the design of the programme itself, which Mathers (2022) argues is equally important. Furthermore, existing PD initiatives often face challenges of scalability and sustainability as many are resource-intensive, requiring substantial time and financial investment, which limits their feasibility for educators in low-resource settings – contexts where the need for accessible and effective PD programmes is arguably the greatest.

This paper addresses these gaps by presenting a theoretical framework for a proposed PD programme that is focused on enhancing early years educators' ability to communicate

effectively with young children, thereby supporting their language and communication development. Drawing on evidence from meta-analyses, systematic reviews, and adult learning theories, we identify the essential characteristics and features of effective PD programmes and use these to inform the design of a practical, self-sustaining PD programme. Our programme incorporates LangQuest, a self-assessment tool, an online course, and collaborative Learning Circles. By making explicit the theoretical underpinnings of this PD programme, this paper seeks to enhance transparency, offer a framework to inform implementation, and provide a practical roadmap to design early years PD programmes.

Characteristics and Components of Effective PD Programmes

PD programmes vary largely in their structure and format, with many meta-analyses (Brunsek et al., 2020; Egert et al., 2018; Markussen-Brown et al., 2017; Sims et al., 2021), reviews (Buysse et al., 2009; Cordingley, 2015; Dunst et al., 2015; Elek & Page, 2019; Sancar et al., 2021; Schachter et al., 2019), and reports (Collin & Smith, 2021; Darling-Hammond et al., 2017; Zaslow et al., 2010) aiming to identify features that constitute an effective programme. Drawing on these sources, we identified key features of effective PD programmes, outlined in Table 1. Features cited as impactful by two or more sources were grouped into "characteristics" and "components". Programme characteristics refer to the overall design, structure, and logistic aspects of the programme, informing how the programme is organised. Active components, on the other hand, are the specific strategies, tools, or practices employed within the programme.

Five characteristics emerged as important, with *sustained* engagement being the most frequently mentioned. While there is no universal definition of "sustained", there is consensus that a single brief workshop is likely to be ineffective (Darling-Hammond et al., 2017; Egert et al., 2018; Schachter et al., 2019). Instead, it is suggested that sustained PD spans several months, or even years, offering repeated opportunities for learning (Darling-Hammond et al., 2017). Such sustained engagement facilitates the internalisation of new knowledge and practices, a key feature of Normalisation Process Theory, which highlights the importance of embedding new practices into everyday routines (May & Finch, 2009; Murray et al., 2010). Egert et al. (2018)'s meta-analysis, which examined the optimal duration of PD, found that a training dosage of 45 to 60 h was more effective than shorter or longer programmes. However, such long programmes may be impractical in low-resource settings, highlighting the need to balance research-based

Table 1 Characteristics and components of effective PD programmes

| | ECE PD reviews | | | | | PD reviews | | | | | | |
|------------------------|-------------------------------|----------------------|---------------------|-----------------------|-------------------------|----------------------|---------------------|-------------------------------|--------------------------|---------------------|----------------------|--------------------|
| | Markussen-Brown et al. (2017) | Zaslow et al. (2010) | Egert et al. (2018) | Brunsek et al. (2020) | Schachter et al. (2019) | Elek and Page (2019) | Dunst et al. (2015) | Darling-Hammond et al. (2017) | Cordingley et al. (2015) | Buyse et al. (2009) | Sancar et al. (2021) | Sims et al. (2021) |
| <i>Characteristics</i> | | | | | | | | | | | | |
| Sustained | | | x | x | x | | x | x | x | x | x | |
| Multi-Format | x | | | | | | | | | | | x |
| Flexible | | x | | | | | | | x | | | |
| Context-Sensitive | | x | | | x | | | | | x | x | x |
| Focused | | | | | | | | x | | x | | x |
| <i>Components</i> | | | | | | | | | | | | |
| Coaching | x | | | x | | | | x | | | | |
| Practice | | | | | x | | x | | | | x | x |
| Feedback | | | | | x | | x | x | | | | x |
| Self-Reflection | | | | | x | | x | x | | | | x |
| Goal Setting | | | | | | | | | | | | |
| Observation | | | | | | | | | | | | |
| Group Engagement | | | | | | | | | | | | |
| | | | | | | | x | x | x | | x | x |

Note. Components or characteristics that were identified to be important in these sources have been marked by 'x'. Only components or characteristics mentioned by more than one source have been included

recommendations and implementation challenges when designing a PD programme.

Studies also suggested that effective PD programmes are *multi-format* (Markussen-Brown et al., 2017; Zaslow et al., 2010), employing a combination of delivery methods such as workshops, coaching, and self-study to accommodate different learning styles and reinforce content through multiple modalities. Effective PD is also *context-sensitive*, i.e., it is aligned to educators' daily practices and curriculum needs (Schachter et al., 2019; Zaslow et al., 2010). This principle is again supported by Normalisation Process Theory, which suggests that uptake of new practices is more likely when they seamlessly integrate into existing routines (May & Finch, 2009; Murray et al., 2010). *Flexible* was also identified as an essential characteristic, with Zaslow et al. (2010) highlighting that PD programmes that are flexible in their timing, format, and duration are more likely to have consistent engagement. Indeed, programmes that accommodate educators' schedules and are not prescriptive increase accessibility, particularly for educators working in resource-constrained settings, ultimately enhancing the likelihood of meaningful and sustained participation.

These findings on the importance of a sustained, multi-format, flexible, and context-sensitive programme also align with the broader PD literature (Buysse et al., 2009; Cordinley et al., 2015; Darling-Hammond et al., 2017; Sancar et al., 2021; Sims et al., 2021). However, the PD literature also emphasises that programmes should be *focused* on specific content areas (Buysse et al., 2009; Darling-Hammond et al., 2017; Sims et al., 2021). While this characteristic has not been identified as critical in studies of early years PD programmes, it may still hold relevance. Focusing on a specific topic allows for deeper engagement with the content, as opposed to a broad, surface-level approach that risks diluting the learning impact. Concentrating on specific areas such as language support equips educators with actionable strategies that are more likely to have a stronger impact on child outcomes.

Among specific programme features, *coaching*, is widely recognised as highly effective (Egert et al., 2020; Elek & Page, 2019; Markussen-Brown et al., 2017; Yang et al., 2022). Pairing educators with expert coaches who observe their practice and provide individualised feedback and guidance, has been shown to be highly effective in improving student outcomes and classroom environment (Egert et al., 2020; Markussen-Brown et al., 2017). Relatedly, *feedback* is another beneficial feature of PD, offering educators with tailored and actionable insights on their practices (Elek & Page, 2019; Schachter et al., 2019). Moreover, *goal setting*, which encourages educators to work towards targeted personal growth, has also been highlighted as an important feature of PD programmes (Elek & Page, 2019; Sims et

al., 2021; Zaslow et al., 2010). Challenging, specific goals foster motivation and accountability, driving meaningful behavioural improvements (Sims et al., 2021).

Self-reflection, i.e., opportunities for educators to critically and intentionally think about their practices, has also been cited as an important feature of PD programmes (Elek & Page, 2019; Schachter et al., 2019). This aligns with the concept of reflexive monitoring in Normalisation Process Theory, which emphasises the importance of deliberate evaluation of daily practices in embedding and sustaining new practices (May & Finch, 2009; Murray et al., 2010). This is further supported by evidence which suggests that educators who engage in self-reflection are more likely to have lasting behavioural changes (Buysse et al., 2009).

Studies also suggest that educators should be provided with a chance to *observe* and model what good practice looks like (Darling-Hammond et al., 2017; Dunst et al., 2015; Elek & Page, 2019). This includes observing strategies, either directly in-person or indirectly (via videos or written case studies), for educators to reflect on or adopt (Collin & Smith, 2021). Observations together with opportunities to *practice* learned skills engages educators in a cycle of concrete experience and iterative practice, in line with Experiential Learning Theory (Kolb, 1984). By practicing observed strategies, educators can translate theoretical knowledge into practical skills, reinforcing their learning and making it more applicable to their unique contexts (Schachter et al., 2019).

Lastly, reviews on broader PD programmes also suggest that *group engagement* and collaboration are important aspects of effective PD (Cordingley, 2015; Darling-Hammond et al., 2017; Sancar et al., 2021). Darling-Hammond et al. (2017) highlight that group engagement often provides educators with opportunities for collaboration, feedback, and shared sense-making. Such opportunities foster social support, which has been shown to enhance the effectiveness of PD programmes (Sims et al., 2021). This aligns with the Social Learning Theory, which emphasises that learning is inherently social, and knowledge is co-constructed through interacting with, participating alongside, and observing others (Chuang, 2021). Despite this, PD programmes typically embed group engagement within other components of the programme (e.g., group discuss following a workshop). Given the strong theoretical foundation supporting the utility of group engagement, there is merit in incorporating a separate component for group engagement through professional learning communities (PLCs). PLCs offer a valuable platform for reflective practice, problem-solving, and mutual support (DuFour & Eaker, 2009), which are especially relevant in early childhood education contexts, as evidenced by the efficacy of PLCs in promoting growth for early years educators (Damjanovic & Blank, 2021). Nevertheless, there

is considerable variation in how PLCs are structured and implemented (Vangrieken et al., 2017), necessitating a carefully designed and feasible approach to ensure meaningful engagement and impact.

Taken together, these meta-analyses, reviews, reports, and adult learning theories highlight that effective PD should be sustained, flexible, multi-format, context-sensitive, and focused on specific topics. Incorporating active components like coaching, feedback, self-reflection, goal setting, and collaborative learning further enhances their effectiveness. These components provide a robust foundation for designing impactful PD programmes that can meaningfully improve educators’ practices and, ultimately, child outcomes.

Current PD Programme Design

The proposed professional development (PD) programme is structured around three key inputs that collectively integrate evidence-based characteristics and components of effective PD (Fig. 1): (1) the LangQuest (Ereky-Stevens et al., 2024) self-assessment tool, which is a self-assessment tool of

educators’ language supporting strategies, (2) a six-month course which supports educators to meaningfully use the LangQuest and develop their knowledge of language-supporting strategies and child development, and (3) monthly learning circles, which provide group engagement opportunities. The programme will be spaced out across six months, which is not only a sustained approach but also seeks to alleviate the time pressure that often hinders PD engagement (Collin & Smith, 2021), ensuring the programme is feasible. Moreover, all three inputs will follow a monthly theme, therefore creating alignment across the inputs and ensuring that educators can delve into specific topics without being overwhelmed.

LangQuest

As previously discussed, coaching has been identified as a key element of successful PD programmes (Brunsek et al., 2020; Egert et al., 2018; Markussen-Brown et al., 2017; Yang et al., 2022). Researchers suggest that coaching works primarily through providing participants with opportunities to receive feedback, reflect on their practice, and set self-directed goals (Elek & Page, 2019). However, while

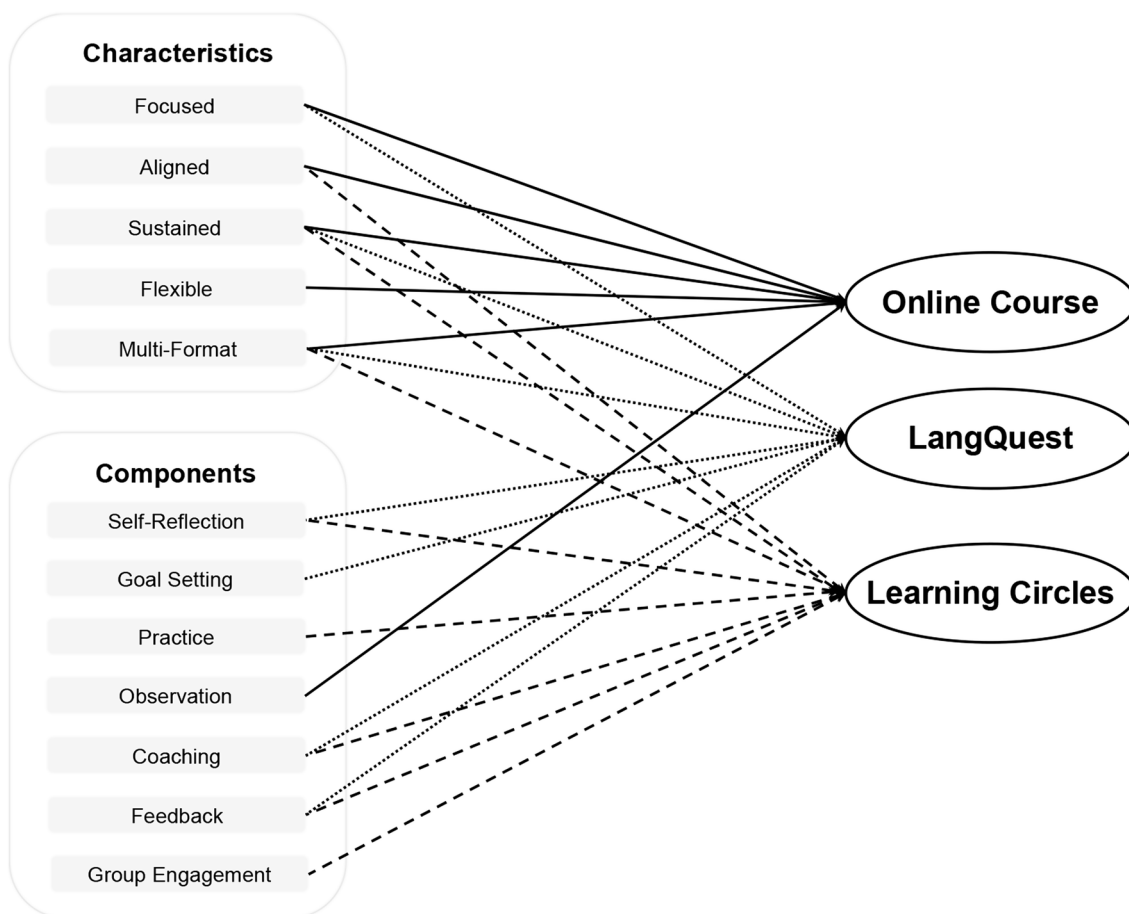


Fig. 1 Characteristics and components informing the programme inputs

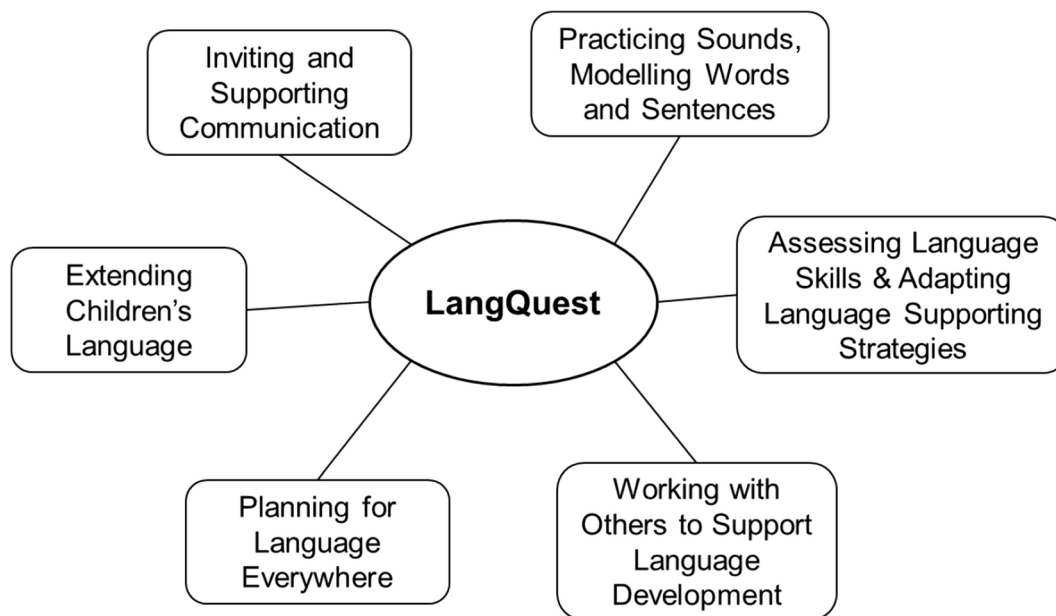


Fig. 2 LangQuest domains

Fig. 3 Sample item from LangQuest

1 Continuously respond to each child in ways that make them feel listened to e.g. stay face-to-face, seek eye contact, take time to listen, praise and show enthusiasm for what the child expresses

Rate your degree of confidence: Not at all confident 1 2 3 4 5 6 7 Highly confident

coaching is effective, it is also an expensive and resource-intensive feature that relies on additional expertise and ongoing support. This reliance on specialised personnel can limit a PD programme’s scalability and long-term feasibility, particularly in contexts with constrained resources.

To address this need for effectiveness and feasibility, we propose using the LangQuest (<https://shorturl.at/07IX8>) to incorporate the key benefits of coaching—feedback, reflection, and goal setting—without its associated costs. LangQuest is a self-report questionnaire, designed to assess early years educators’ confidence in employing language-supporting strategies with children aged 2–4 years. The questionnaire has 29 items across six domains (Fig. 2), which are rated on a 7-point scale, from 1 (not at all confident) to 7 (highly confident) (Fig. 3). This confidence-based rating scale not only captures educators’ comfort and readiness to apply strategies but also their self-efficacy, which has been suggested to be a strong predictor of effective programme implementation (Bandura, 1977; Tschannen-Moran & Hoy, 2001).

Importantly, LangQuest covers both process quality, such as teacher-child interactions, and structural quality, such as the classroom environment—both of which are vital components of effective PD programmes for early years language development (Markussen-Brown et al., 2017). By giving examples strategies for each item (e.g., Fig. 3), the tool

guides educators in identifying, then evaluating their own practices. The items have been distilled from careful review of the research literature and from consultation with experienced educators across a range of settings. These ‘best practice’ strategies have been found to predict high language development in young children (Jamil et al., 2015).

A key strength of LangQuest lies in its potential to promote continuous reflection of educators’ own practice and its impact on children, identifying the strategies they are using, assessing their relevant contributions to children’s development, and using that to improve their own practice. Moreover, educators’ responses on the LangQuest can be used to develop a personalised ‘profile’ that gives educators feedback on their practices and guides them to set goals in relevant domains. This self-directed feedback and goal setting acts as a form of self-coaching, which not only empowers educators, enhancing their self-efficacy and intrinsic motivation for behaviour change (Bandura, 1977), but also provides a low-cost and low-resource alternative to traditional coaching models.

Despite the LangQuest’s potential, the self-coaching approach is not without limitations. Like all self-report questionnaires, responses on the LangQuest are subject to bias – educators may overestimate or underestimate their abilities, particularly if they lack prior exposure to the strategies being evaluated. Moreover, completing LangQuest

alone may not be sufficient to promote deep self-reflection, provide meaningful feedback or foster effective goal setting. To address these challenges, LangQuest may be integrated in a programme with guided course content that provides support in interpreting results of the LangQuest, critically appraising them, and using them to set realistic goals.

Educators will be encouraged to engage with the course content based on the outcomes of their LangQuest self-assessment, thus avoiding the limitations of a one-size-fits-all approach often observed in traditional PD formats (Schachter, 2015). To encourage sustained engagement with the LangQuest, while also providing opportunities to update their responses on the LangQuest, educators will be asked to complete the tool once a month throughout the PD programme. Additionally, they will be encouraged to engage with specific sections of LangQuest weekly, corresponding to each month's content focus. To promote additional practice, educators will be prompted to document their experiences of using different strategies as they work through each module. This approach is intended to maintain consistent engagement and deepen reflection, while ensuring that educators' self-assessment evolves alongside their practice.

Online Course

The online course is designed to guide educators in making the most of LangQuest by encouraging meaningful self-reflection and providing the necessary support to interpret their personalised profiles to get feedback and set goals. It aims to do so by building educators' knowledge of language-supporting strategies and deepen their understanding of child development. This dual focus ensures that educators not only learn effective strategies but also understand the underlying principles of why and how these strategies support children's language and communication development. Research indicates that such contextualised higher-order knowledge enhances the uptake and sustained use of strategies (Mathers et al., 2022) and is a predictor of classroom environment (Mathers, 2021) and child language outcomes (Mathers et al., 2022).

To this end, the course uses video recordings of educators demonstrating effective language and communication strategies, building educators' understanding of why different strategies are being used and how it impacts children. Participants will be encouraged to reflect on these demonstrations and identify ways to incorporate similar strategies into their own classrooms. They will be further guided to adapt these strategies to their specific classroom contexts, ensuring the skills are personalised and actionable in their everyday practice. Using this hands-on approach, we aim to encourage participants to practice and refine their skills, mirroring the process through which procedural pedagogical

knowledge is generated and applied (Mathers et al., 2022), while also encouraging reflection and experimentation.

The course content will be organised into six themes that correspond to each LangQuest domain (Fig. 2) and emphasises progressive mastery by allowing educators to focus on one theme per month. This incremental approach will allow for a period of focused engagement with one set of strategies at a time, preventing cognitive overload (Collin & Smith, 2021), while also providing educators with time and opportunities to practise strategies within their classroom context before introducing new strategies (Sims et al., 2021).

To accommodate the varied schedules and preferences of adult learners, the course content can be accessed at educators' own pace, reflecting the importance of autonomy in adult learning (Sancar et al., 2021). However, while self-paced learning can be empowering, it also raises concerns about consistency in engagement. To address this, the programme guide will provide a structured yet non-prescriptive timeline, recommending that educators allocate approximately three hours per month to the online content and complete each theme's content within its designated month. Overall, the online course will be free-to-access with sufficient guidance on navigating its content, reducing the need for additional support and ensuring the course is feasible and scalable.

Learning Circles

The proposed programme incorporates PLCs by dividing educators into consistent groups, termed learning circles, of 5–7 participants that meet at the end of each month for an hour throughout the PD duration to discuss their learning and application of strategies in their classrooms. Each month's learning circle session will be structured around the preceding month's theme, creating a direct link between individual learning and collaborative discussion. This alignment not only reinforces content but also allows participants to address shared challenges and learn from those within their professional community. However, the effectiveness of the learning circles depends on group dynamics and the facilitation process. To address this, participants will be provided with suggested meeting agendas, reflection prompts, and discussion questions tailored to each monthly theme, ensuring discussions are productive and focused, even without external facilitation. To further support collaboration and communication, an online platform will be available where participants can take part in asynchronous online communication and collaboration, such as group chats or discussion boards. This approach of loosely structured, participant-led discussions maximises accessibility by eliminating the need for external facilitators or expensive materials, making it

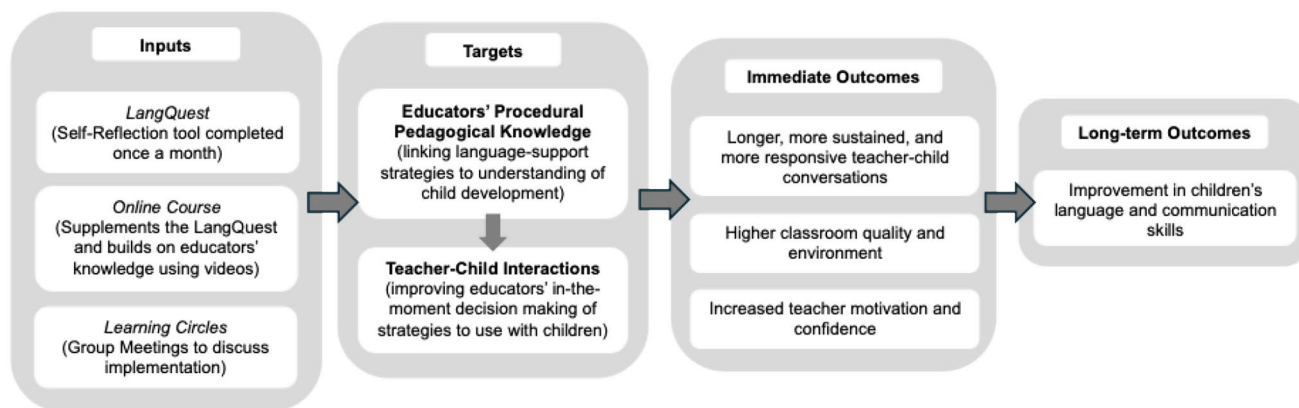


Fig. 4 PD programme theory of change

particularly well-suited for under-resourced settings and for scalability.

Programme Theory of Change

The theoretical framework underpinning our programme's content integrates insights from Markussen-Brown et al. (2017), who emphasise the need for early years language PD programmes to address process quality (the nature of teacher-child interactions), structural quality (classroom resources and organisation), and educator knowledge. It also incorporates findings from Mathers et al. (2022) who highlight the critical role of procedural knowledge, i.e., educators' understanding of how and when to apply language-supporting strategies in practice, on young children's language development.

The ability to communicate effectively with young children is key to providing high-quality early years learning, driving both the quality of teacher-child interactions and children's developmental outcomes. In line with that, our PD programme's proposed theory of change (Fig. 4) posits that the LangQuest, online course, and Learning Circles will provide opportunities for meaningful self-reflection, observation, practice, goal setting, and group engagement. Collectively, these inputs will develop educators' understanding of child development, connect this knowledge to language-supporting strategies, and refine their ability to make informed, in-the-moment decisions about which strategies to use, thereby improving their higher-order procedural knowledge and teacher-child interactions.

In the short-term, these inputs are expected to result in better use of language-supporting strategies, longer and more responsive teacher-child interactions, and higher classroom quality. Moreover, we also anticipate that the regular use of LangQuest and the focus on developing educators' procedural knowledge will improve their motivation and

confidence. In the long-term, we expect that more responsive teacher-child interactions, higher classroom quality, and increased teacher motivation will result in improvements in children's language and communication skills.

Considerations & Future Work

By explicitly detailing the theories and rationale underpinning our approach, this paper represents an initial effort to address the lack of transparency and theoretical foundations in the design of PD programmes (Elek et al., 2024; Gupta & Daniels, 2012; Mathers, 2022; Schachter, 2015), providing guidance to those interested in developing a similar programme or incorporating the LangQuest into a PD programme. Rather than conducting a systematic review, we synthesised findings from existing meta-analyses, reviews, and reports to distil practical guidance for the development of this PD programme. This approach bridges theory, research, and practice, allowing for the design of a programme that is evidence-based and sustainable.

We anticipate that the programme will evolve during implementation, with modifications guided by feedback from educators and outcomes of evaluations. A key aspect of this process involves co-creation with educators prior to the programme's launch to ensure its relevance and practicality (Ngeze & Iyer, 2022; Potvin et al., 2023). Co-creation workshops, informed by a well-defined theoretical framework, will help align the programme design with educators' needs and priorities (O'Brien et al., 2016), while staying grounded in evidence. Moreover, during the first year of the programme, we will offer minimal facilitation to participants if needed; however, our goal is to establish a self-sustaining programme that does not rely on continuous external facilitation, allowing educators to independently manage their ongoing development.

The proposed programme draws heavily on the LangQuest, a self-assessment tool that is based on a rich literature base and on feedback from professionals through the Dephi Exercise (Ereky-Stevens et al., 2024). This evidence-based tool aligns well with the broader aim of creating a PD programme that is based on research findings and is accessible and free to use. By empowering educators to engage in self-reflection and goal setting, the tool provides an alternative to expert coaching that does not rely on external resources or ongoing financial investment. However, questions remain about whether LangQuest can provide the same depth of insight as expert coaching. Therefore, further research is needed to evaluate its validity and long-term effectiveness within a PD programme. Nonetheless, this paper serves as the first step in addressing these questions and exploring LangQuest's potential as a tool for educator growth and improved teaching practices.

Another important consideration is the cultural validity of the LangQuest tool, which focuses on improving the quality of teacher-child interactions. High-quality teacher-child interactions have been identified as predictors of positive child outcomes across diverse cultural contexts (e.g., Araujo et al., 2016; Betancur et al., 2021; Leyva et al., 2015; Li et al., 2016). Therefore, we believe that the LangQuest is likely to be culturally valid in terms of its content focus. However, some items, which focus on individualised interactions with each child (e.g., item 1) may require adaptation in settings with large teacher-to-student ratios. Additionally, items focused on phonological awareness (e.g., item 16) may also require adaptation for different linguistic settings. Lastly, the example strategies for some items may also need to be modified to include more culturally relevant examples (e.g., replace 'Three Billy Goats Gruff' with another game). Future work could focus on piloting these items across different contexts to assess their applicability and validity in diverse settings.

Conclusion

By explicitly outlining the research and theoretical framework underpinning our programme a priori—rather than justifying it *post hoc*—we aim to set a new standard for transparency in PD programme development. Our programme is centred around LangQuest, a structured self-assessment that aims to empower educators to reflect, understand their practice and set personalised goals. Combined with an online course and monthly learning circles, our PD model integrates core characteristics and components identified as effective in existing research on educator PD. This triadic structure aims to build educators' procedural knowledge to support them in communicating more effectively with

children – a key attribute of expert early years educators. Doing so in a practical and low-cost manner, will enhance the programme's utility in diverse educational settings and potential for scalability.

Declarations

Conflicts of interest We have no conflicts of interest to disclose.

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