

Early Educators' Knowledge of Early Language Pedagogy:

How can it be measured and does it matter for child language outcomes?

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EXECUTIVE SUMMARY

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Theory and practice tell us that teachers need knowledge of content (*what children need to learn*) and of pedagogy (*how to support the learning of that content*). This study explores relationships between teachers' **pedagogical** knowledge and children's language progress between ages 3 and 5. It forms the second stage in validation of a new measure designed to capture such knowledge: the **Observing Language Pedagogy (OLP)** instrument.

The OLP uses video to capture early educators' oral-language-related **procedural** knowledge of pedagogy. In contrast to theoretical knowledge, procedural knowledge means knowing how *in practice*. It is the dynamic, flexible pedagogical knowledge which underpins educators' real-time decision-making in the classroom.

The first stage in validating the OLP took place within a randomised controlled trial (RCT) designed to evaluate a preschool professional development programme. Findings showed that the OLP is a reliable measure of procedural knowledge and that it predicts classroom quality: teachers with greater knowledge led classrooms with higher-quality practice¹.

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The aim of the current study is to explore whether teachers' procedural knowledge (as measured by the OLP) also predicts children's language outcomes at the end of the Early Years Foundation Stage (EYFS). It uses data from the original RCT on 70 teachers, and 797 children in their classes, drawn largely from schools in disadvantaged areas of England. The study investigates whether children with more knowledgeable teachers in their reception year (age 4-5) had better outcomes at age 5 than children with less knowledgeable teachers, controlling for child language at age 3 and a range of other child, teacher and school factors.

Completing the OLP involves watching two short videos of adult-child interactions and recording strategies being used which are likely to support children's oral language. The OLP assesses educators' ability to *identify* and *interpret* language-supporting strategies in context, capturing knowledge which can be unlocked and used 'in the moment'. Responses are coded to reflect three facets (**perceiving, naming, interpreting** – see over).

Four researcher-administered measures of child language outcomes were used, reflecting children's understanding and use of vocabulary and grammar. A further three measures reflected children's achievement in teacher-completed national assessments at age 5: overall level of development, communication/language and literacy. The final measure was children's standardised score from the national phonics check completed in Year 1 (age 6).

PERCEIVING: the extent to which educators can **identify** language-supporting strategies in the OLP videos. Since respondents have a choice of which strategies to report, responses reflect their ability to identify the most *salient* strategies – those likely to be most important for children's language learning in that specific context.

NAMING: the extent to which respondents use '**expert vocabulary**' to describe the strategies they identified, e.g., using the specific term '*open questions*' rather than the more informal '*how and why questions*'. This reflects more formal and explicit knowledge of the relevant concepts. In the initial validation study¹, teachers' use of expert vocabulary (*naming*) predicted classroom quality (Figure 1).

INTERPRETING: the extent to which respondents offer an **explanation or analysis** of the strategy they identified, e.g., suggesting what the adult's pedagogical goal might have been, or noting an observed effect on the child. This reflects higher-level knowledge, specifically, the ability to connect knowledge about child development and pedagogy (understanding **why** as well as **how**). In the initial validation study, teachers' *interpreting* predicted classroom quality (Figure 1).

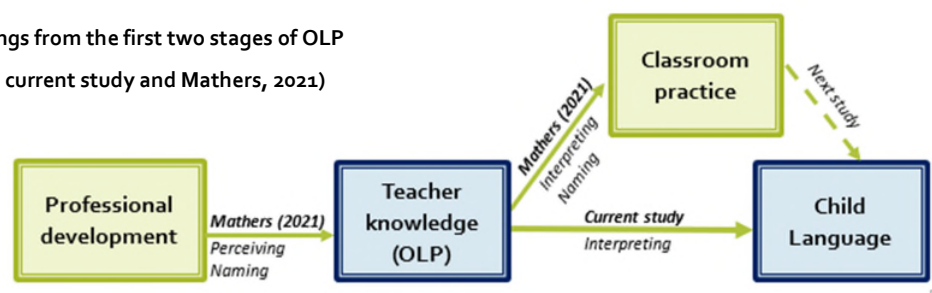
Findings

Reception class teachers' knowledge predicted gains in children's understanding of vocabulary and sentence structure between ages 3 and 5.

While teachers' ability to identify salient strategies in videos (*perceiving*) was associated with child language outcomes, when all three facets of knowledge were included in the same statistical model, *interpreting* was a stronger predictor (Figure 1). Therefore – although knowing which strategy is appropriate in a specific context matters – understanding *why* such strategies might be effective matters more for child language outcomes. Given findings

from the initial validation study⁰ that knowledge also predicts observed quality of classroom practice (Figure 1), it is plausible that this association between teacher knowledge and child language is mediated by improvements in practice – that is, teachers who can connect their knowledge of pedagogy and child development in order to *interpret* video interactions are also more likely to use language-supporting strategies intentionally when interacting with children, with resultant benefits for child language outcomes. This mediation pathway will be examined as the next stage of work.

Figure 1: Findings from the first two stages of OLP validation (the current study and Mathers, 2021)



Conclusions and Implications

1. To ensure early years educators are **prepared** to support young children's oral language, we need to invest in nurturing their early-language-related pedagogical knowledge (the dynamic, procedural knowledge which informs real-time classroom decision-making and action).

2. Specifically, educators should be **supported** in connecting their knowledge of language-supporting strategies with knowledge of child development, in order to understand **why** as well as **how** specific techniques support oral language development.

Promising avenues for attention might include:

For government and providers of qualifications and professional development for early years educators:

Ensuring that pre- and in-service professional development opportunities are available which explicitly nurture oral-language-related pedagogical knowledge and, specifically, those which promote pedagogical *reasoning*. This might include structured opportunities to reflect on and analyse practice in a way which makes the relationships between pedagogy and child outcomes explicit (e.g., observing adult-child interactions, either live or on video, to analyse child learning needs, strategies which might support learning, and the success of strategies employed).²

For early years staff teams:

Setting aside regular time for professional conversations about language-supporting practice which make explicit and/or analyse relationships between pedagogy and young children's outcomes. This might range from informal end-of-day discussions to more structured activities (e.g., video-recording and analysing practice).

For researchers:

- Including measures of procedural knowledge in studies of early years educator qualifications and professional development, in order to facilitate understanding of how such knowledge can be enhanced; and also how such knowledge translates into action;
- Conducting further research into how pedagogical reasoning (*interpreting*) can be supported and enhanced through professional development

¹ Mathers, S. (2021) Using video to assess preschool teachers' pedagogical knowledge: explicit and higher-order knowledge predicts quality, *Early Childhood Research Quarterly*, 55, 64–78.

² For example: Van Es, E. A. & Sherin, M. G. (2002). Learning to notice: Scaffolding new teachers' interpretations of classroom interactions. *J Tech Teach Educ*, 10(4), 571–596.