

In the know

It is traditionally hard to prove how pedagogical knowledge impacts children's outcomes, but a new Oxford University study has gained new ground. By **Caroline Vollans**

How do skilled early years practitioners teach? What knowledge do they need to draw on to do it well? While previous studies have successfully measured what teachers know, their content knowledge, and found this matters for child outcomes, researchers have long struggled with measuring knowledge of how best to teach that content (their pedagogical knowledge). This sort of knowledge is much less visible and very hard to measure. And the trouble is, if we can't measure something, we can't prove to policymakers and the public that it matters (or design professional development to help us improve it).

However, new research from the University of Oxford marks the first time that early years practitioners' knowledge of how to teach has been measured and found to make a difference to children's outcomes. The study looked specifically at educators' knowledge and selection of language-supporting strategies around oral language development.

Dr Sandra Mathers, who led the research, says, 'We were interested in capturing pedagogical knowledge that makes high-quality adult-child interactions possible. It is not theoretical knowledge of the sort that is written on paper. It is a live, usable knowledge that enables practitioners to make in-the-moment decisions when interacting with children.'

She adds, 'This dynamic pedagogical knowledge is hard to measure. And if we cannot measure something, it is often not valued.'

WHAT DO PRACTITIONERS KNOW?

Researchers measured the language progress of almost 800 Reception-age children across the EYFS.



They asked:

- Does an educator's pedagogical knowledge matter for children's language outcomes?
- If so, what aspects of knowledge are most important for child outcomes?

Instead of giving practitioners traditional written questionnaires, which often are highly simplistic and fail to capture context, Mathers' research asked educators to respond to videos of real adult-child interactions. They were then asked to identify strategies used by the adult which could support children's language development.

The aim was to capture knowledge of language-supporting strategies in context, so that the measurement was grounded in practice. The Observing Language Pedagogy (OLP) instrument devised by Mathers' team is the first tool to do this.

Everton Nursery School and Family Centre uses the Observing Language Pedagogy approach

- The study, which was funded by the Nuffield Foundation, can be found here: <https://bit.ly/3RWzyH7>

Examples of language-supporting strategies identified by teachers include:

- using rich vocabulary such as 'slower', 'faster', 'steep'
- offering a running commentary of the children's actions
- listening to the children and valuing their ideas.

The research measured three aspects of knowledge. The aim was to explore which mattered most for child language development:

1. Perceiving – participants identify the strategies they think are most powerful in each video clip. For example, using questions.
2. Naming – participants use more specialist vocabulary to describe strategies. For example, referring to the use of open questions or descriptive commentary.
3. Interpreting – participants give an interpretation of a strategy, saying why it was used or the

EYFS best practice: how to teach

effect on the child. For example, naming a picture in a book to extend the child's vocabulary.

THE FINDINGS

The children who made most progress in their understanding of vocabulary and grammar between three and five were those whose educators had more knowledge of oral language pedagogy. The most effective teachers could connect their knowledge of language-supporting strategies with their knowledge of child development, to understand why a strategy might be used, or what effect it might have on children's language.

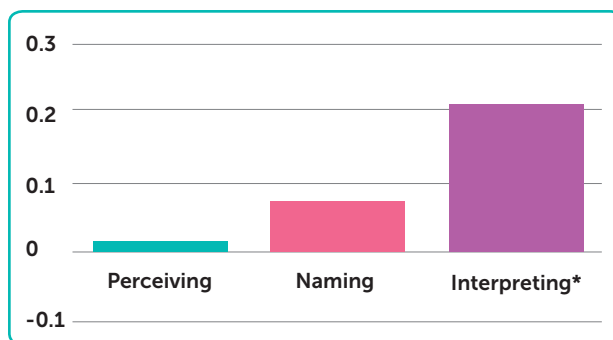
Of the three aspects of knowledge, interpreting had the biggest effect on child outcomes. In other words, it is not enough for practitioners to identify an effective language-supporting strategy. They need to know which strategy to use and why it works in that context. Mathers says, 'I think of this as "pedagogical reasoning" or "analysis". The educators whose children made most progress were those who could link their knowledge of child development and pedagogy. I think this kind of knowledge predicts child outcomes because it underpins intentional practice.'

The practitioner is able to select a strategy deliberately to develop oral language in a specific way.

RESEARCH IMPLICATIONS

The implications of the research are threefold:

- the child: makes significantly more progress with oral language when the educator has knowledge of language-supporting strategies they can use in interactions.



Association between pedagogical knowledge and children's understanding of vocabulary (measured by the British Picture Vocabulary Scale)

* Statistically significant effect.

- practitioners: need knowledge of why strategies are effective, not only how to perform them.
- professional development: should support educators in developing pedagogical knowledge of oral language and specifically in developing their pedagogical reasoning or analysis.

Mathers says, 'Our earlier research shows this kind of knowledge does not always develop naturally through experience. Developing pedagogical reasoning may need explicit attention and practice. For example, professional development which links knowledge of language-supporting strategies with knowledge of child development and supports educators to put the theory into practice.'

Making time to reflect on your own practice and finding ways to do this as a team are also important, Mathers says. 'This might be through professional conversations at the end of the day or analysing videos together. For example, discussing children's language: which strategies were used, how

effective they were, what else might have been done, and so on.'

'Many practitioners use these approaches unconsciously in their practice,' says Dr Lesley Curtis, head teacher of Everton Nursery School and Family Centre, who adopted the OLP approach for her own staff team and practitioners on training programmes. 'The research reminds and encourages them to be more consciously aware of the practices they use and why they use them.'

Mathers adds, 'The takeaway is to think about how you can exercise your analytical muscles regularly. This will help intentional practice to come naturally. We need to make every moment count for children's language development.' ■

practitioner responses: interpretation in action

Each of these responses demonstrates the educator's ability to use interpretation, a key finding from the research. They not only comment on what they did, but what they were focusing on in terms of the child's language development.

'I noticed how I introduced the story well by using book cues such as title, author and illustrator. Perhaps I needed to focus on the story illustration more to extend the language by using "I wonder" questions.'

'I heard myself talking a lot through the activity, but next time I will stop and give time for the children to talk. It's OK to have the space to think too.'

'Selecting my own video clip to reflect on first and then share with the team enables me to have ownership of my own data.'

'I think I could have extended the child's language when he commented "car" pointing to the image of the car. I should have commented back, "It's a blue car", but I only repeated the word "car". I will review my practice for extending sentences.'

'The child said "... into a bean stalk" and I repeated it back to her saying, "... into a gigantic bean stalk" so that I was extending her vocabulary.'

case study: Everton Nursery School and Family Centre

Head teacher Dr Lesley Curtis uses video clips which staff reflect on both individually and as a team. She explains, 'A colleague films a member of staff when they are sharing a story with a child or talking about an activity. They then take the video and watch the footage alone or with their team if they feel confident enough. The main aim is to ascertain how they are using language. Do they recast or extend it? Do they introduce new vocabulary and how? Do they undertake a running

commentary when involved in a baking activity, for example?'

So far, she has found that:

- Practitioners find video a helpful guide for reflecting and analysing their own interactions, and those of others. Working as a team is key.
- It is important for leaders to observe their team in action, supporting them with the necessary tools to analyse their practice.

Curtis adds, 'Since we adopted this model, staff have developed further

insights into pedagogy and child development. They find being able to analyse their practice in a safe environment is highly supportive and helps them to build confidence.

'This new research has continued to build on our practice. I cannot emphasise enough the role of the early years practitioner when interacting with young children. This is especially critical for those from disadvantaged backgrounds. The OLP tool is helping us to develop our work around this.'