

**How effective is language and communication training in early years settings?**  
**A report for Sefton School Readiness Team**  
**20.06.16**  
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## **1. Summary**

Children who enter school with poor language and communication skills are significantly less likely to achieve success in later life than their more advanced peers. Thus, providing a language-boosting environment in early years settings is one of the most effective things we can do to improve children's life-chances (e.g. Hart & Risley, 1995).

In this study we tested the effectiveness of early years practitioner training in language and communicative development by looking at how practitioners implement the techniques they have learnt. We videoed practitioners interacting with children in their nurseries, one-to-one, and coded the videos for the incidents of language boosting behaviour they produced. We also gave practitioners a checklist to test their knowledge of how to promote children's development.

The results showed that language and communication training is effective both at increasing practitioners' knowledge of children's language and communicative development, and at increasing the number of language-boosting techniques they used when interacting with children.

However, it may not be necessary to train all practitioners to be language and communication experts in order to create communication friendly nurseries. Practitioners who had not received any formal training themselves used more language boosting techniques if they were working in a nursery that had a Language Champion on site. In other words, the Language Champion model, in which Language Champions receive extensive training that they then take back to cascade to the rest of their team, seems to be an effective one.

## **2. Background**

Children who enter school with poor language and communication are significantly less likely to achieve success in later life than their more advanced peers. Poor language has a substantial negative effect on school achievement, children's behaviour, mental health, and on employability (Gross, 2016).

However, disadvantaged children with good vocabulary at age five are significantly more likely to 'buck the trend' and escape poverty in later life (Bladen, 2006). This means that providing a language-boosting environment in early years settings is one of the most effective things we can do to improve children's life-chances (e.g. Hart & Risley, 1994).

A variety of materials are available to early years practitioners to help them create communication-friendly environments, from sources such as national government (e.g. the Department of Education's ECAT), leading charities (e.g. ICAN's Small Talk) and private providers (e.g. ELKLAN). The language-boosting techniques advocated in these materials are not difficult techniques to master. Most training focuses on teaching some very simple language-boosting techniques to use when interacting with children.

These techniques are well-evidenced in the main. For example, ICAN's Small Talk booklet advises that adults "Share books and talk about the story and characters" and "comment on what the different characters look like and what they do". This advice is based on good evidence that children who read regularly with an adult in the preschool years tend to learn language faster, enter school with a larger vocabulary and become more successful readers in school (Bus et al., 1995; Mol et al., 2008).

However, we do not know whether simply training practitioners to use language boosting techniques is ultimately effective in changing their behaviour. In other words, do busy early years practitioners remember the training advice they were given, and implement it faithfully when talking and playing with children? This is particularly important when we consider that some of these techniques may be quite difficult to implement. For example, ICAN's advice (above) suggests that practitioners "Share books and talk about the story and characters". However, children with low levels of language, who are at risk of language impairment, are often very reluctant to speak. It might take significant initiative and creativity to work out how to encourage a child with very little language to engage in a conversation about the story and characters of a book. This is an important evidence-gap, because if local authorities and settings are to pay for language and communication training they need to know that it is going to be effective at changing practitioner behaviour and, ultimately, impact on children's language.

In this study we investigate the effectiveness of early years practitioner training in language and communicative development by testing how practitioners implement the techniques they have learnt when playing with children in early years settings. We tested, in particular, the effectiveness of the Language Champion training model. Language Champions receive extensive training in language and communicative development, which they then take back to their settings. There, they act as a specialist themselves – cascading information to the rest of the early years team, and acting as a point of contact for queries and problems. The model, if it works, can be very cost-effective; not only because it gives each nursery a specialist on site, but also because it limits the number of staff members who have to undergo intensive training.

However, we do not yet know whether this model works. We do not know whether practitioners situated in a Language Champion nursery implement the techniques successfully, whether or not they have undergone training themselves. **Thus, the first aim of this study was to test whether early years practitioners who were situated in a Language**

**Champion (LC) nursery used significantly more language-boosting techniques when interacting with children than practitioners situated in other (non-LC) nurseries.**

We also compared practitioners' use of language-boosting techniques when interacting with 2- and with 3-year old children. Since the extension of free nursery places to 2-year-olds is a recent development, practitioners are likely more familiar with the developmental milestones of children from the age of 3 years upwards. We anticipated that this could make it harder for them to implement language-boosting techniques with 2-year-olds. **The second aim of the study, thus, was to test whether trained and untrained practitioners were equally effective at implementing language-boosting techniques with 2-year-olds as 3-year-olds.**

Finally, we tested the effect of language and communication training on practitioner's knowledge of children's language development. We asked the question: do practitioners who undergo training know more about how children learn language than those who do not have any training? We asked this question on the assumption that practitioners who understand how children learn language, and thus \*why\* language-boosting techniques are likely to be effective, are likely to be more effective at implementing these techniques when interaction with children. **The third aim of the study, then, was to use a questionnaire – the SPEAK survey – to test whether the practitioners who had received language and communication training knew more about children's development than practitioners who had received no training.**

## **2. Method**

### **2.1. Participants:**

#### **2.1.1. Observational study (aims 1 and 2)**

Six nursery settings were identified by the School Readiness Team at Sefton Council; three with a Language Champion present on site and three without. In each nursery, four practitioners agreed to take part. Two were paired with 2-year old children, and two were paired with 3-year-old children. None of the children were bilingual and none had severe additional needs or speech or language impairment. In total 24 practitioners took part, 12 from a Language Champion nursery, and 12 from another nursery. Written consent was obtained from all practitioners and from the parents of all children who took part. Ethical approval was provided by the University of Liverpool Ethics Committee

#### **2.1.2. SPEAK survey (aim 3)**

All 24 practitioners who took part in the observational study filled in the SPEAK checklist. An additional 52 early years practitioners from across Sefton took part. Practitioners either filled in the SPEAK checklist online via Qualtrics or on paper.

## **2.2. Materials and Procedure**

### **2.2.1. Observational study (aims 1 and 2)**

Recordings took place in the practitioners' nurseries. Practitioners and children were video-recorded playing with toys, one-to-one, in a separate room (if available) away from other children in the setting. They were asked to play with a set of toys brought by the researchers. The toys were carefully selected in order to represent different areas of learning; for example a train track set for small world, books and jigsaws for numeracy and literacy, musical instruments and puppets for imaginary play. Each video recording lasted for fifteen minutes.

The videos were then coded, off-line by a researcher. Each video was coded for the behaviours listed in table 1 below. Each of these behaviours is a language-boosting technique taught in one or more of the training materials listed in the Appendix. For each behaviour, we calculated a score that told us how often the practitioner used that language boosting behaviour. For example, for turn-taking we calculated the number of child turns divided by the number of total turns (adult+child). A high score indicated that the practitioner gave the child lots of opportunities to speak, which is a positive language-boosting behaviour according to the training materials. Scores for individual behaviours were then combined into a composite "Language Boosting Behaviour" score.

Table 1: Language-boosting behaviours coding scheme: Practitioner behaviour was coded for the following behaviours.

Coding	Description	Examples
Child turn-taking	How often the practitioner gives the child an opportunity to take a turn in the conversation	N/A
Gesture	How often the practitioners used a co-speech gesture	Practitioner flaps her arms while saying " <i>birds fly, don't they?</i> "
Language boosting talk	How many of the practitioner utterances were "language-boosting" (e.g. . open questions, comments, prompts)	The following encourage children to talk, and learn, language: Open questions to extend children's thinking " <i>What did you do in the park yesterday?</i> " Comments on what is happening " <i>The doggie is going into the field, isn't he?</i> " Prompts to encourage children to talk, ask questions or make comments
Response to the child	How often the practitioner responded to a child vocalization or gesture with a language-boosting response (expanding the utterance or moving the topic forward)	Expansions provide the child with clues to how they can use words: e.g <i>Child: Doggie</i> <i>Adult: yes a doggie with a long tail.</i>

		<p>Move ons encourage discussion about the topic the child has introduced</p> <p>e.g.</p> <p><i>Child: doggie</i></p> <p><i>Adult: yes. He has lots of food in his bowl, doesn't he? I wonder who fed him? Can you see his mummy?</i></p>
Response to error	How often the practitioner responded to a child error by recasting the error with the correct form	<p>A recast gives the child information about their error without explicitly correcting it</p> <p>e.g. .</p> <p><i>Child: doggie sleep</i></p> <p><i>Adult: yes the cat's asleep, isn't he?</i></p>

### 2.2.2. SPEAK survey (aim 3)

Practitioners were given the option of filling in the SPEAK survey in paper copy or online. The SPEAK checklist (*Survey of Parental Expectations And Knowledge About Language Learning*) was designed by researchers from the The Thirty Million Words Initiative at the University of Chicago, and was used by our research team with permission.

The SPEAK asks questions about adults' expectations about when to expose babies and young children to language (e.g. "*When do you think a child is ready to be exposed to words?*"), about their knowledge of how children learn language (e.g. *How much do you agree or disagree with this statement? When babies babble, they are practising how to have a conversation*"), and about their knowledge of how to promote language development "*How much do you agree or disagree with this statement? Overhearing conversations is a great way for an infant to pick up on new words*".

There are also sections on bilingualism, on maths, on TV watching and with some more general questions about development and readiness for school (*How much do you agree or disagree with this statement: The things a young child learns before he or she goes to school matter very little in the long run.*).

We also asked about the practitioners' age, gender and type of workplace (private nursery, preschool etc).

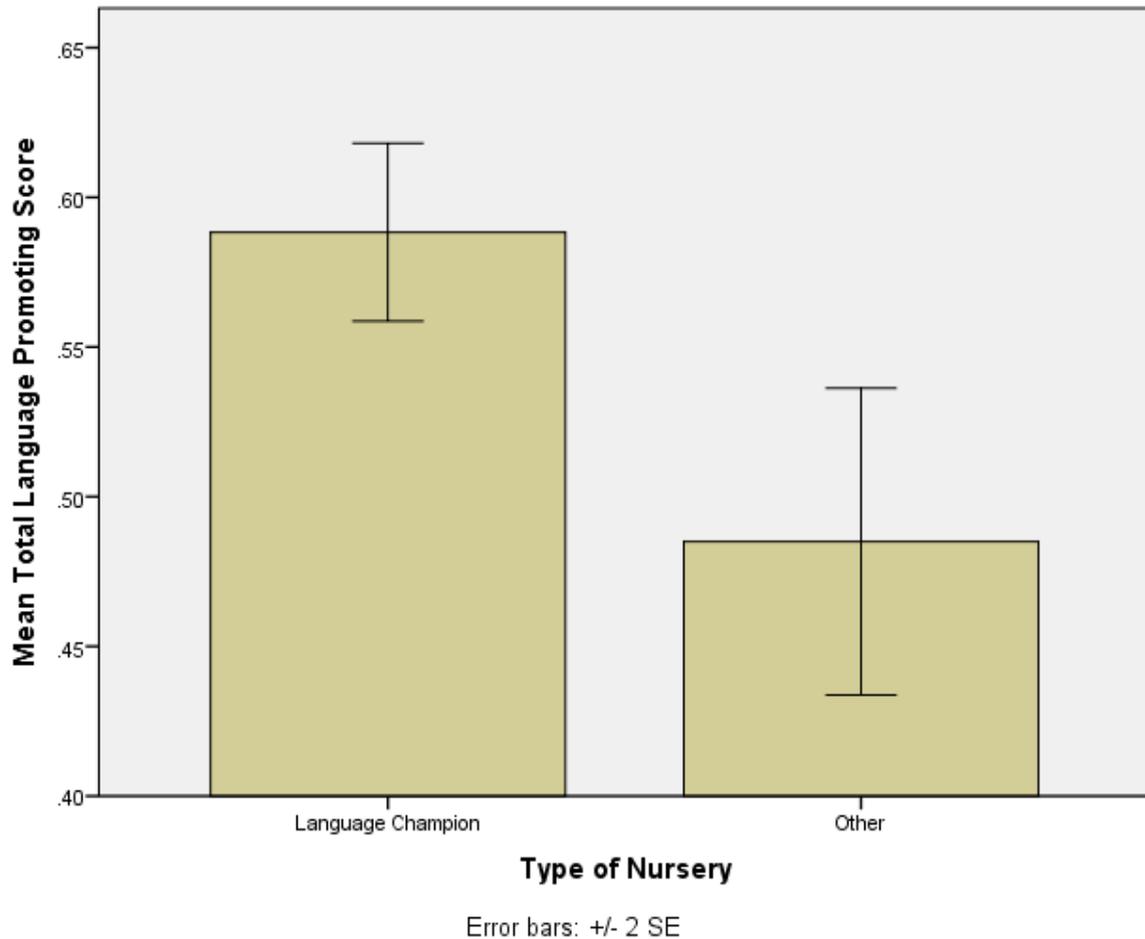
## 3.Results

### 3.1. Observational results

The first analyses tested whether the practitioners in Language Champion nurseries (i.e. nurseries with at least one Language Champion present) used more language-boosting behaviours when interacting with children than those in other (non-LC) nurseries.

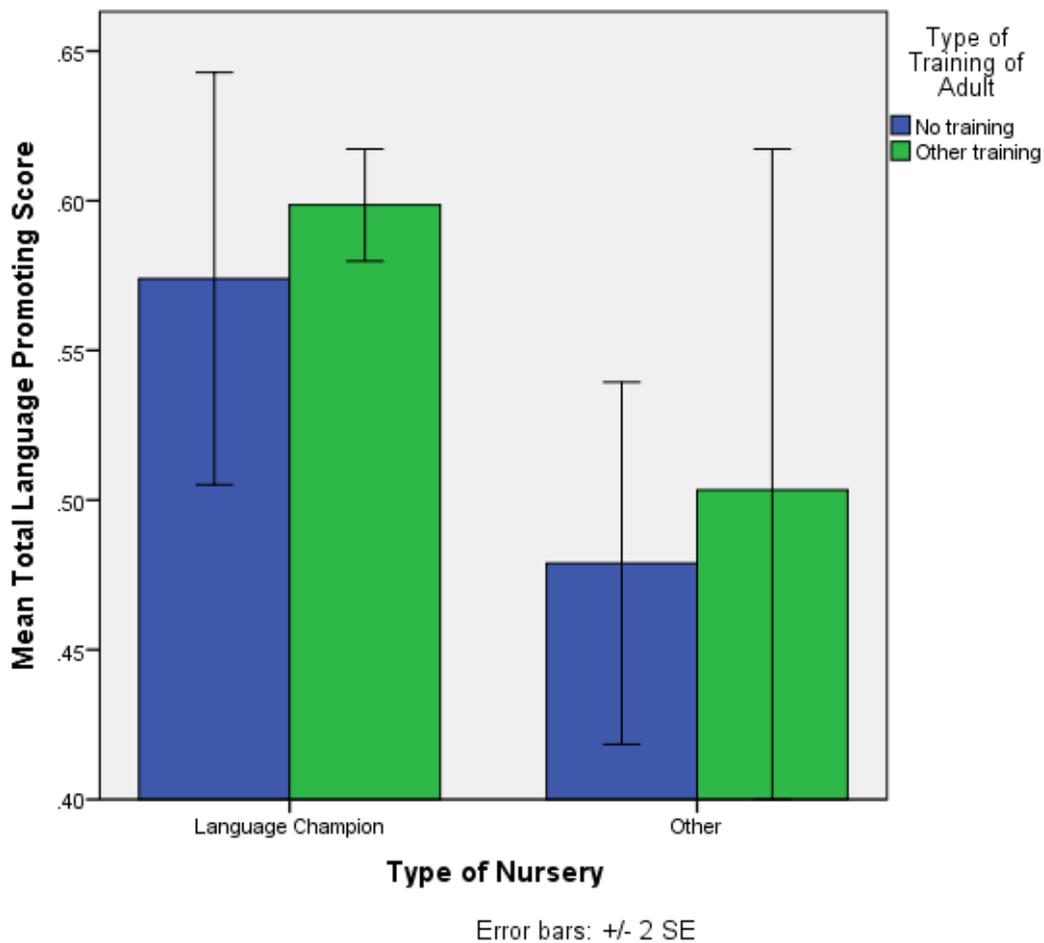
Figure 1 below shows the mean proportion of practitioner behaviours that were coded as “language-boosting/promoting”. Statistical tests showed that practitioners in Language Champion nurseries used significantly more language-boosting behaviours than those in Other (non-Language Champion) nurseries ( $F(1,22) = 12.17, p = .002, \eta^2 = .36$ ).

**Figure 1: Mean proportion of practitioner behaviours that were coded as language boosting by nursery type (Language Champion vs Other)**



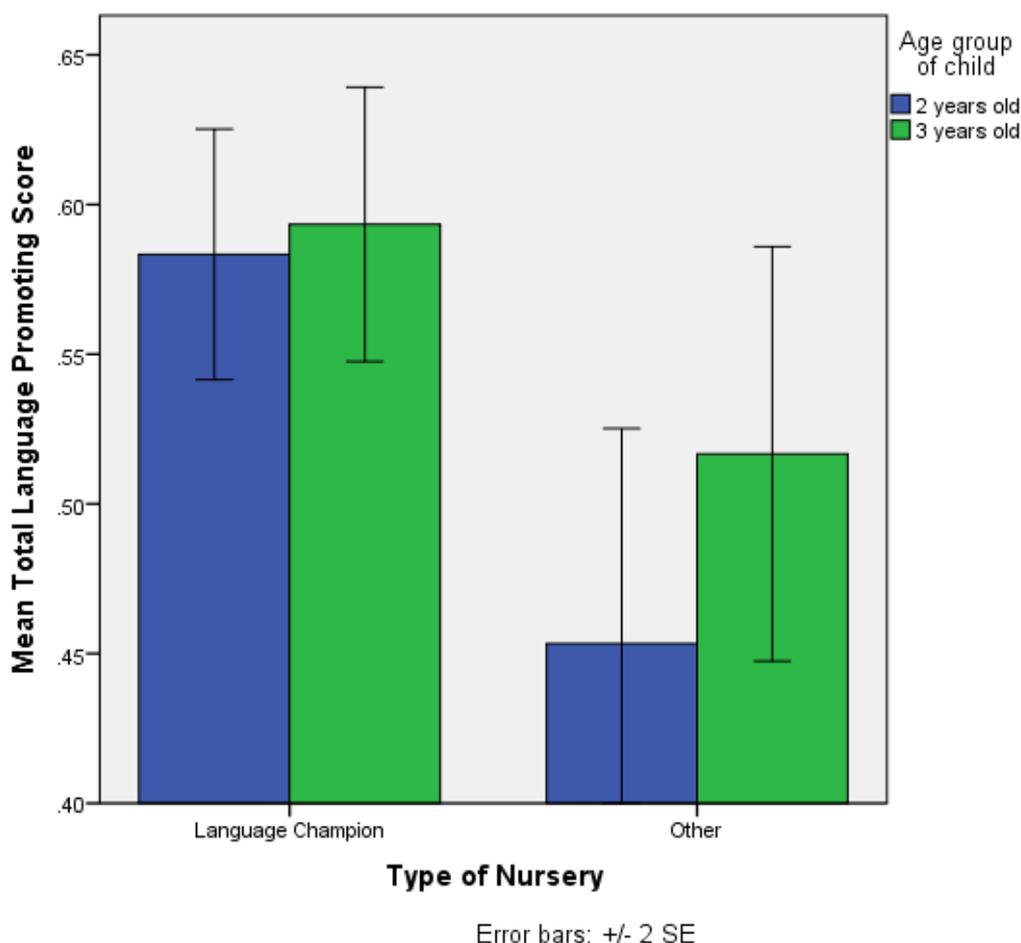
Importantly, practitioners in Language Champion nurseries used more language-boosting behaviours even if they had not themselves had any language and communication training. Figure 3 shows the proportion of language boosting behaviour used by practitioners with and without training, in the different nurseries. Practitioners who had not received any formal training themselves (blue bars) used more language boosting behaviours if they were working in a Language Champion nursery.

**Figure 2: Mean proportion of practitioner behaviours that were coded as language boosting by Nursery type and Training.**



Finally in this section we tested whether the practitioners used fewer language boosting behaviours with 2-year-old than with 3-year-olds (see figure 4). This prediction was not upheld. Though it looks from the figure as if the practitioners in the non-LC nurseries used fewer behaviours with 2-year-olds, this difference was not significant (Main effect of age,  $F(1,20) = 1.56, p = .23$ , Interaction age x nursery type  $F(1,20) = .82, p = .38$ ).

**Figure 3: Mean proportion of practitioner behaviours that were coded as language boosting by Child age and Nursery type.**



### 3.2. SPEAK results

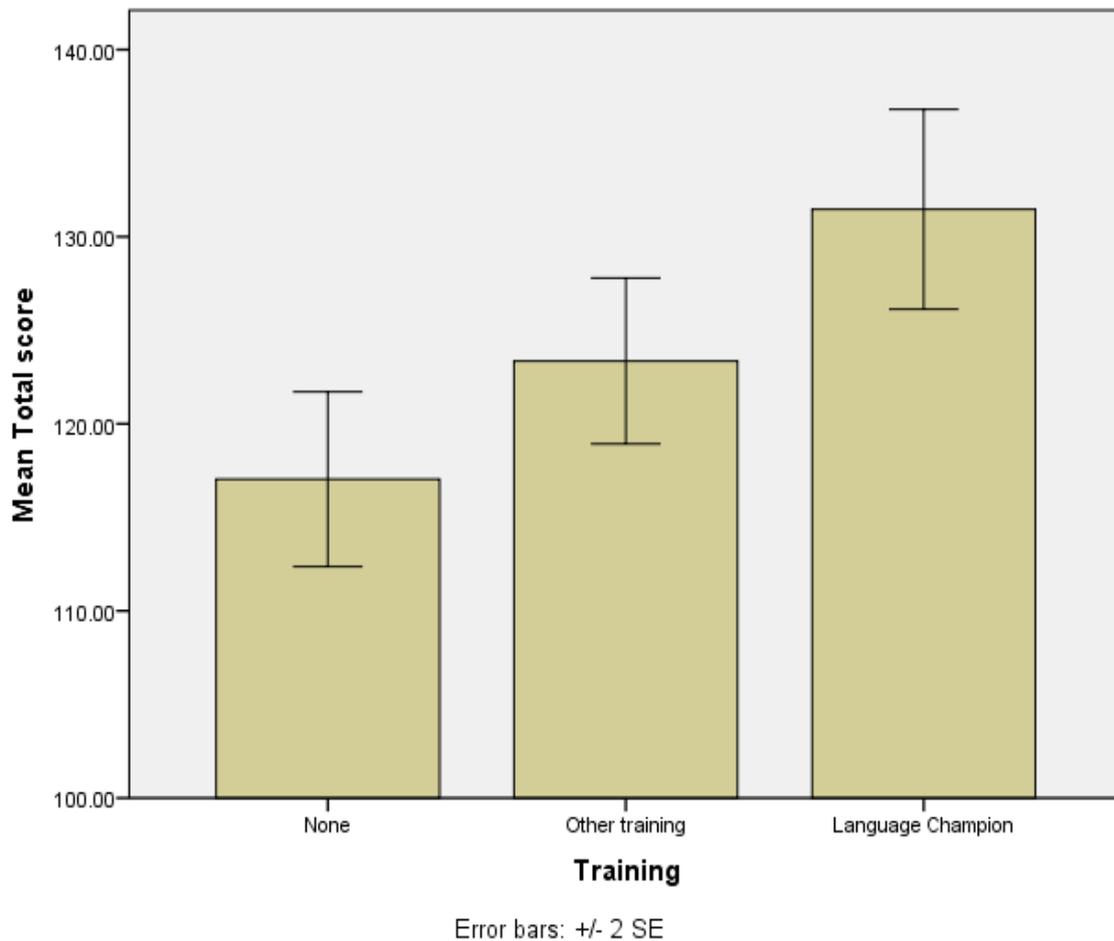
This section describes the results of the SPEAK survey that tested practitioner knowledge of child development, focussing on language and communication. For this analysis we looked only at the training the practitioner had received, not at nursery type.

Forty-four of the practitioners who took part had received some type of language and communication training (e.g. Wellcomm, Hanen, ELKLAN etc). Fourteen of these had received Language Champion training. Thirty two had not received any training at all.

Overall the trained practitioners scored significantly higher than the non-trained practitioners ( $F(2,73) = 7.49, p = .001, \eta^2 = 0.17$ ). The differences were not large (see figure 1) but they were significant. Practitioners who had received Language Champion training scored significantly more highly than practitioners who had received other types of training ( $p = .047$ ). Practitioners who had received other types of training score more highly than those

who had received no training ( $p < .001$ ). In other words, training, especially Language Champion training, improved practitioners' knowledge of child development.

**Figure 4: Total SPEAK scores for practitioners with and without training**



## Discussion

The study had three main findings:

- early years practitioners who were situated in a Language Champion (LC) nursery used significantly more language-boosting behaviours when interacting with 2- and 3-year old children than practitioners situated in other (non-LC nurseries). This effect held even when the training of the practitioners themselves was taken into account.
- There was no effect of age. The practitioners used equal numbers of language-boosting behaviours with 2-year-olds as with 3-year olds.
- Practitioners who have had language and communication training know more about children's development than practitioners who have had no training.

In sum, language and communication training is effective at changing the way practitioners behave when interacting with children. In addition, the practitioners who had received training knew more about children's development than those who had received no training.

However, it may not be necessary to train all practitioners to be language and communication experts in order to create communication friendly nurseries. Practitioners who had not received any formal training themselves used more language boosting behaviours if they were working in an Language Champion nursery. In other words, the Language Champion model, in which Language Champions receive extensive training which they take back to settings to cascade to the rest of their team, seems to be an effective one.

## References

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## Appendix

Provider	Name of programme	Intended audience	Age directed at	Resources available
Hanen	It takes two to talk	Parents of children with language delays	Early Years	Training Programme Booklet DVD
Hanen	Learning language and loving it	Educators	Early Years	Training Programme Booklet DVD
EYFS guidance	DfE and FoundationOrg	Practitioners	Early Years	Various resources ECAT Guidance 1st instalment
ECAT	DfE (last government)	Practitioners	Early Years	
EYFS guidance	Birth to three matters	Practitioners	Early Years	Booklet
Birth to Seven Matters	SSTEWScales	Practitioners	Early years	Book and resource sheets
SALT team Sefton	Communication Supporting Setting checklist	Practitioners	Early Years	Resource sheet
	Key Strategies to promote communication	Practitioners		Resource sheet
ELKLAN	ELKLAN adult-child interaction observation tool	Practitioners		Resource sheet
BCRP (Better Communication Research Programme)	Classroom Observation Tool	Practitioners	Foundation years	Resource sheet Guidance & Tech Report
TCT/ICAN	Top tips for developing talk	Parents and practitioners		Resource Sheet
TCT/ICAN	Small Talk	Parents and practitioners	Early years (age specific)	Booklet
TCT/ICAN	Celebrating Communication Toolkit	Parents and practitioners		Booklet
TCT/ICAN	Listen up	Parents and practitioners		Booklet
National Children's Bureau	Making it REAL (using ORIM framework)	Practitioners		Resource folder