

**Last reviewed:** January 2019

**Intervention website:** <https://speechandlanguage.org.uk/>

# GUIDEBOOK INTERVENTION INFORMATION SHEET

## Talk Boost KS1

Please note that in the ‘Intervention summary’ table below, ‘child age’, ‘level of need’, and ‘race and ethnicities’ information is **as evaluated in studies**. Information in other fields describes the intervention as **offered/supported by the intervention provider**.

Intervention summary	
<b>Description</b>	Talk Boost KS1 is a school-based intervention for children with delayed language development between the ages of 4 and 7 years old. It is delivered by teaching assistants to children in groups of four children for 10 weeks. The intervention aims to improve children’s oral language development.
<b>Evidence rating</b>	2
<b>Cost rating</b>	1
<b>Child outcomes</b>	<ul style="list-style-type: none"> <li>Enhancing school achievement and employment</li> <li>- Improved speech, language and communication.</li> </ul>
<b>Child age</b> (population characteristic)	4 to 7 years old
<b>Level of need</b> (population characteristic)	Targeted Indicated
<b>Race and ethnicities</b> (population characteristic)	<ul style="list-style-type: none"> <li>Pakistani/Pakistani British</li> <li>White British.</li> </ul>

## Foundations Guidebook – Intervention information sheet

Visit the Foundations Guidebook | [www.foundations.org.uk/guidebook](http://www.foundations.org.uk/guidebook)

Intervention summary	
<b>Type</b> (model characteristic)	Group
<b>Setting</b> (model characteristic)	Primary school
<b>Workforce</b> (model characteristic)	Teaching assistants
<b>UK available?</b>	Yes
<b>UK tested?</b>	Yes

## Model description

Talk Boost KS1 is a school-based intervention for children aged between 4 and 7 years old (in Reception and Key Stage 1) with delayed language development. Children are selected by teachers to take part in the intervention.

It is delivered by trained teaching assistants to groups of four children in primary school. The teaching assistant provides three weekly sessions of 30 to 40 minutes each, over 10 weeks (30 sessions).

During the sessions, the practitioner uses interactive activities, games, role-play, and storytelling, supported by picture materials. The activities are aimed at developing:

- Children's attention and listening skills through group work
- Vocabulary acquisition, through definition of new words and opportunities to use them
- Sentence building, through a system of colour-coding sentence parts
- Social communication skills, including storytelling and conversations, building children's confidence and giving opportunities for them to retell stories.

The teaching assistant can model language through these activities, which are enjoyable and engaging for the children. There is also a class-focused component for the whole class, which is delivered once a week in sessions up to 30 minutes long, and an optional home-based component, which involves home activities once a week lasting up to 20 minutes in duration.

The intervention aims to improve children's core language development, and consequently social and emotional development and academic achievement.

## Foundations Guidebook – Intervention information sheet

Visit the Foundations Guidebook | [www.foundations.org.uk/guidebook](http://www.foundations.org.uk/guidebook)

### Target population

<b>Age of child</b>	4 to 7 years old
<b>Target population</b>	Children in primary school who are identified as having delayed language development.

Please note that the information in this section on target population is as **offered/supported by the intervention provider**.



## Theory of change

Why		Who	How	What		
Science-based assumption	Science-based assumption	Science-based assumption	Intervention	Short-term outcomes	Medium-term outcomes	Long-term outcomes
Delays in early language development, including reduced vocabulary and expressive language skills, can persist throughout school.	Early language development is an important part of children's ability to engage in learning at school, and contributes to social and emotional development.	Family disadvantage negatively impacts parents' ability to provide an enriching home learning environment, including for language learning.	Teaching assistants work with groups of children to increase their understanding and talking through interactive activities, storytelling, and games, focusing on attention and listening, learning vocabulary, and building sentences.	<ul style="list-style-type: none"> <li>• Improved child language and communication</li> <li>• Improved child confidence and curiosity.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased child ability to engage in learning at school</li> <li>• Reduced social and emotional difficulties.</li> </ul>	Increased child school achievement.



## Implementation requirements

<b>Who is eligible?</b>	Children identified by teachers as having delayed language development.
<b>How is it delivered?</b>	Talk Boost KS1 is delivered in 30 sessions of 30 to 40 minutes' duration each by a practitioner, to groups of four children. There is also a weekly whole-class session of 30 minutes' duration, and optional home activities for parents and their child.
<b>What happens during the intervention?</b>	<ul style="list-style-type: none"> <li>• The sessions consist of interactive activities, games, role-play, conversation, and storytelling</li> <li>• These are supported by picture materials</li> <li>• The activities are aimed at developing children's attention and listening skills, sentence building, vocabulary acquisition, and social communication skills</li> <li>• There is also a weekly whole-class activity, and optional home activities for parents to do with their child.</li> </ul>
<b>Who can deliver it?</b>	The practitioner who delivers this intervention is a teaching assistant or a teacher.
<b>What are the training requirements?</b>	The practitioners have five hours of intervention training. Booster training of practitioners is not required.
<b>How are practitioners supervised?</b>	Supervision of practitioners is not required.
<b>What are the systems for maintaining fidelity?</b>	<p>Intervention fidelity is maintained through the following processes:</p> <ul style="list-style-type: none"> <li>• Training manual</li> <li>• Other printed material</li> <li>• Other online material</li> <li>• Video or DVD training.</li> </ul>
<b>Is there a licensing requirement?</b>	No



## Implementation requirements (Cont.)

<b>*Contact details</b>	<p>Organisation: Speech and Language UK</p> <p>Email address: <a href="mailto:info@speechandlanguage.org.uk">info@speechandlanguage.org.uk</a></p> <p>Websites: <a href="https://speechandlanguage.org.uk/">https://speechandlanguage.org.uk/</a>  <a href="https://speechandlanguage.org.uk/educators-and-professionals/programmes-for-nurseries-and-schools/talk-boost/early-talk-boost/">https://speechandlanguage.org.uk/educators-and-professionals/programmes-for-nurseries-and-schools/talk-boost/early-talk-boost/</a></p> <p>*Please note that this information may not be up to date. In this case, please visit the listed intervention website for up to date contact details.</p>
-------------------------	--

## Evidence summary

Talk Boost KS1's most rigorous evidence comes from an RCT conducted in the UK consistent with Foundations' Level 2 evidence strength threshold.

This study identified statistically significant improvements in language and communication skills.

Talk Boost KS1 has preliminary evidence of improving a child outcome, but we cannot be confident that the intervention caused the improvement.

## Search and review

	Number of studies
<b>Identified in search</b>	3
<b>Studies reviewed</b>	1
<b>Meeting the L2 threshold</b>	1
<b>Meeting the L3 threshold</b>	0
<b>Contributing to the L4 threshold</b>	0
<b>Ineligible</b>	2



## Individual study summary: Study 1

Study 1	
Study design	RCT
Country	UK
Sample characteristics	180 children aged 4 to 7 years old identified as having delayed language development
Race, ethnicities, and nationalities	<ul style="list-style-type: none"> <li>• Pakistani/Pakistani British</li> <li>• White British.</li> </ul>
Population risk factors	<ul style="list-style-type: none"> <li>• Children identified by teachers as having delayed language development</li> <li>• Schools are located in areas of high deprivation.</li> </ul>
Timing	<ul style="list-style-type: none"> <li>• Baseline</li> <li>• Post-intervention.</li> </ul>
Child outcomes	<ul style="list-style-type: none"> <li>• Improved expressive language – oral narrative skills</li> <li>• Improved expressive language – vocabulary</li> <li>• Improved expressive language – grammar.</li> </ul>
Other outcomes	None
Study Rating	2
Citation	Lee, W. & Pring, T. (2016) Supporting language in schools: Evaluating an intervention for children with delayed language in the early school years. <i>Child Language Teaching and Therapy</i> . 32 (2), 135–146.

## Brief summary

### Population characteristics

This study involved a sample of 180 children across 18 schools in areas with high levels of deprivation in West Yorkshire and Lancashire, in England, UK.

Children were selected by their teachers for having immature language for their age, poor vocabulary, poorly structured sentences, and insufficient language for learning, play, or socialising.



Children known to have language impairment or special educational needs were excluded from the study.

Across the Talk Boost Ks1 and control groups, 44% were girls (46% in the Talk Boost KS1 group and 42% in the control group). The majority of EAL pupils were of Pakistani origin, but these were analysed separately, as they were mostly in two schools which were in the Talk Boost KS1 group. In the EAL group, 41% were girls.

## **Study design**

In this cluster RCT, 10 schools (72 children) were randomly assigned to receive Talk Boost KS1 and 8 schools (69 children) to a wait-list control condition. An additional 39 children with English as an Additional Language (EAL) formed the EAL Talk Boost KS1 group. The EAL group was formed because only two schools had substantial numbers of EAL pupils, and these were both assigned to the Talk Boost KS1 group. There were substantial differences between groups in baseline measures.

The wait-list control group received business as usual and received the Talk Boost KS1 intervention when the intervention group had finished.

## **Measurement**

Assessment took place at baseline (pre-intervention) and post-intervention (after 10 weeks).

- **Child assessment** measures included the Bus Story and the Renfrew Action Picture Test (RAPT) (administered by independent Speech and Language Therapists and Therapist students).

## **Study retention**

### ***Post-intervention***

82% (115) children were retained in the analysis at post-intervention, representing 86% (62) of Talk Boost KS1 children and 77% (53) of control.

Although data was collected on all children at both timepoints, 10 intervention group children and 16 control group children were excluded from the analysis because they were found to have scores at baseline above the mean for their age on two or more of the measures.

## **Results**

### ***Data-analytic strategy***

A MANOVA was conducted, with the difference scores of all outcome scores as the dependent variable, and group and age (Reception/Year 1/Year 2) as fixed factors. ANOVAs were also conducted on each dependent variable, using a 3-factor mixed ANOVA with time as a within-participant variable and group and age (Reception/Year 1/Year 2) as between-participant variables. The analysis did not account for the clustered design.



## Findings

The study observed statistically significant benefits favouring the Talk Boost KS1 children, including improvement in children's language and communication skills.

## Limitations

The conclusions that can be drawn from this study are limited by methodological issues pertaining to unequivalent groups, and the treatment condition not being modelled at the level of assignment, hence why a higher rating is not achieved.

## Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Expressive language – oral narrative skills	Bus Story (Renfrew, 1997) (child assessment)	N/A	Yes	115	Post-intervention
Expressive language - vocabulary	RAPT – Information score (child assessment)	N/A	Yes	115	Post-intervention
Improved expressive language – grammar	RAPT – Grammar (child assessment)	N/A	Yes	115	Post-intervention

## Other studies

The following studies were identified for this intervention but did not count towards the intervention's overall evidence rating. An intervention receives the same rating as its most robust study or studies.

I CAN. (2012) *Talk Boost interim report: The development phase*. **This reference refers to a pre–post study, conducted in the UK.**

I CAN. (2013) *A Chance to Talk: A national pilot programme – a scalable model for improving children's communication skills at primary school*.



—

**Note on provider involvement:** This provider has agreed to Foundations' terms of reference (or the Early Intervention Foundation's terms of reference), and the assessment has been conducted and published with the full cooperation of the intervention provider.