

Nuffield Early Language Intervention (30 weeks)

Review: January 2019

The Nuffield Early Language Intervention (NELI) (30 weeks) is an oral language programme. It is a targeted programme for children between the ages of 3 and 6. It is delivered in nursery and the first year of primary school (reception).

The programme is targeted at children who show weakness in their oral language skills and are, therefore, at risk of experiencing difficulty in education.

It begins with 10 weeks of learning while children are in nursery, followed by a further 20 weeks of learning while children are in reception. The component in reception contains the same content as the [20-week NELI programme](#).

The intervention is delivered by trained teaching assistants. Sessions focus on improving children's vocabulary, developing narrative skills, encouraging active listening and building confidence in independent speaking.

Evidence
rating: **3+**

Cost rating: **2**

EIF Programme Assessment

Nuffield Early Language Intervention (30 weeks) has evidence of a **short-term positive impact** on child outcomes from at least one rigorous evaluation.

Evidence
rating: **3+**

What does the evidence rating mean?

Level 3 indicates **evidence of efficacy**. This means the programme can be described as evidence-based: it has evidence from at least one rigorously conducted RCT or QED demonstrating a statistically significant positive impact on at least one child outcome.

This programme does not receive a rating of 4 as it has not yet replicated its results in another rigorously conducted study, where at least one study indicates long-term impacts, and at least one uses measures independent of study participants.

What does the plus mean?

The plus rating indicates that this programme has evidence from at least one level 3 study, along with evidence from other studies rated 2 or better.

Note that this guidebook page describes the 30-week version of the Nuffield Early Language Intervention that is delivered in both nursery and the first year of primary school. There is another version of this programme, delivered in 20-weeks, that is delivered exclusively in the first year of primary school. This version can also be found on the guidebook with an EIF Strength of Evidence Level 3+.

Cost rating

A rating of 2 indicates that a programme has a medium-low cost to set up and deliver, compared with other interventions reviewed by EIF. This is equivalent to an estimated unit cost of £100–£499.

Cost rating: **2**

Child outcomes

According to the best available evidence for this programme's impact, it can achieve the following positive outcomes for children:

Enhancing school achievement & employment

Improved oral language

Based on study 1

Increase in oral language ability (measured using a composite of vocabulary, grammar, and listening scales)

Improvement index: **+12**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 62% and worse outcomes than 38% of their peers, if they had received the intervention.

Immediately after the intervention

Increase in oral language ability (measured using a composite of vocabulary, grammar, and listening scales)

Improvement index: **+12**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 62% and worse outcomes than 38% of their peers, if they had received the intervention.

6 months later

Based on study 2

Improved taught vocabulary

Based on study 1

0.76-point improvement on the picture naming task

Improvement index: **+13**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 63% and worse outcomes than 37% of their peers, if they had received the intervention.

Immediately after the intervention

0.68-point improvement on the picture naming task

Improvement index: **+30**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 80% and worse outcomes than 20% of their peers, if they had received the intervention.

6 months later

Based on study 1

2.41-point improvement on the definition asking task

Improvement index: **+12**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 62% and worse outcomes than 38% of their peers, if they had received the intervention.

Immediately after the intervention

1.39-point improvement on the definition asking task

Improvement index: **+21**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 71% and worse outcomes than 29% of their peers, if they had received the intervention.

6 months later

Improved narrative skills

Based on study 2

Improved phoneme awareness

Based on study 2

Improved reading comprehension

Based on study 2

Key programme characteristics

Who is it for?

The best available evidence for this programme relates to the following age-groups:

- Preschool
- Primary school

How is it delivered?

The best available evidence for this programme relates to implementation through these delivery models:

- Individual
- Group

Where is it delivered?

The best available evidence for this programme relates to its implementation in these settings:

- Children's centre or early-years setting
- Primary school

How is it targeted?

The best available evidence for this programme relates to its implementation as:

- Targeted indicated
-

Where has it been implemented?

United Kingdom

UK provision

This programme has been implemented in the UK.

UK evaluation

This programme's best evidence includes evaluation conducted in the UK.

About the programme

What happens during delivery?

How is it delivered?

- Nuffield Early Language Intervention (30 weeks) is delivered by one trained teaching assistant. It begins with 30 sessions over 10 weeks in nursery, comprising three 20-minute sessions delivered to groups of 2–4 children each week. It is followed by 100 sessions over 20 weeks in primary school, comprising three 30-minute group sessions (to groups of 3–5 children) and two 15-minute individual sessions each week.

What happens during the intervention?

- The mixture of small group and individual sessions focus on improving children's vocabulary, developing narrative skills, encouraging active listening and building confidence in independent speaking.
- In the last 10 weeks, activities promoting phonological awareness and letter-sound knowledge are introduced.
- Children develop their vocabulary and language skills within a structured framework that follows established principles for teaching listening, vocabulary and narrative.
- Narrative work gives children the opportunity to practise taught vocabulary in connected speech and introduces them to key story elements and the sequencing of events while encouraging expressive language and grammatical competence.

What are the implementation requirements?

Who can deliver it?

- The practitioner who delivers this programme is a teaching assistant with QCF-3 level qualifications.

What are the training requirements?

- Practitioners have two days of programme training. Booster training of practitioners is not required.

How are the practitioners supervised?

- Practitioner supervision is not required.

What are the systems for maintaining fidelity?

Programme fidelity is maintained through the following processes:

- Training manual
- Other printed material
- Face-to-face training.

Is there a licensing requirement?

There is no licence required to run this programme.

How does it work? (Theory of Change)

How does it work?

- Oral language skills are a critical foundation for educational success as well as for wider psycho-social well-being.
- This targeted intervention improves the oral language skills of children entering school with poor language.
- In the short term, children improve both expressive and receptive language skills.
- In the longer term, lasting improvements in oral language places the children at lower risk of reading failure and enables them to benefit fully from their education.

Intended outcomes

Supporting children's mental health and wellbeing
Enhancing school achievement & employment

Contact details

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<http://www.nuffieldfoundation.org/nuffield-early-language-intervention> <https://www.elklan.co.uk/neli/about-neli> <https://g>
<https://www.youtube.com/watch?v=10q6WMFnmzo> <https://www.youtube.com/watch?v=PTrCEaW52Jw>

About the evidence

Nuffield Early Language Intervention (30 weeks) has evidence from at least one rigorously conducted RCT along with evidence from an additional comparison group study.

Consequently, the programme receives a 3+ rating overall.

Study 1

Citation: Fricke et al., 2017 and Sibieta, Kotecha, & Skipp, 2016 | **Design:** RCT

Country: United Kingdom | **Study rating:** 3

Sample: 394 pupils with an average age of 3.8 years and standardised language scores in the low-average range. 49% were female and 29% were eligible for free school meals.

Timing: Post-test; 6-month follow-up

Child outcomes:

Improved oral language

Improved taught vocabulary

Improved taught vocabulary

Other outcomes:

None measured

Fricke, S., Burgoyne, K., Bowyer-Crane, C., Kyriacou, M., Zosimodou, A., Maxwell, L., Lervåg, A., Snowling, M.J., Hulme, C. (2017). The efficacy of early language intervention in mainstream school settings: a randomized control trial. *Journal of Child Psychology and Psychiatry*, 58:10, 1141–1151.

Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/jcpp.12737>

Sibieta, L., Kotecha, M., & Skipp, A. (2016). *Nuffield Early Language Intervention: Evaluation Report and Executive Summary*. Education Endowment Foundation.

Available at: <https://eric.ed.gov/?id=ED581138>

Study design and sample

This study is a rigorously conducted RCT.

This study involved random assignment of children to Nuffield Early Language Intervention (NELI) (30 weeks), a 20-week version of NELI and a waiting control group.

This study was conducted in the UK, with a sample of children who showed weakness in their oral language skills. The sample recruited had standardised language scores in the low-average range with a high proportion having clinically significant language difficulties. The average age of the full sample was 3.8 years, 49% were female and 29% were eligible for free school meals.

Measures

- **Oral language** was measured using a composite measure consisting of vocabulary, grammatical and listening comprehension tests (direct assessment). These included, for **vocabulary**: the Clinical Evaluation of Language Fundamentals (CELF) Expressive Vocabulary subtest, the Information Score from the Renfrew Action Picture Test (APT) and the British Picture Vocabulary Scale (BPVS); for **grammar**: the CELF Sentence Structure subtest and the APT Grammar Score; for **listening comprehension**, children were asked to listen to two short stories adapted from the York Assessment of Reading for Comprehension (YARC) and answer questions about them.
- **Taught vocabulary** was measured by using picture naming and asking children for definitions of words, based on a random selection of the vocabulary taught during the programmes (direct assessment).
- **Early literacy skills** were measured using the Letter-Sound Knowledge subtest from the YARC (direct assessment).
- **Word-level reading**: Word level reading accuracy was measured using the YARC Early Word Reading subtest (direct assessment).
- **Reading comprehension** was assessed using two beginner passages from the YARC Passage Reading test (direct assessment).

Findings (for NELI 30 weeks)

This study identified statistically significant positive impact on a number of child outcomes.

This includes:

- Oral language (at post-test and at 6-month follow-up)
- Taught vocabulary (at post-test and at 6-month follow-up).

Study 2

Citation: Fricke, Bowyer-Crane, Haley, Hulme, & Snowling, 2013 | **Design:** RCT

Country: United Kingdom | **Study rating:** 2

Sample: 180 children with a mean age of 4 years and weakness in oral language skills

Timing: Post-test; 6-month follow-up

Child outcomes:

Improved oral language

Improved narrative skills

Improved phoneme awareness

Improved reading comprehension

Other outcomes:

None measured

Fricke, S., Bowyer-Crane, C., Haley, A. J., Hulme, C., & Snowling, M. J. (2013). Efficacy of language intervention in the early years. *Journal of Child Psychology and Psychiatry*, 54(3), 280-290.

Available at:

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.801.2192&rep=rep1&type=pdf>

Study design and sample

This study is an RCT.

This study involved random assignment of children to a Nuffield Early Language Intervention group or a waiting control group.

This study was conducted in the UK, with a sample of children with a mean age of 4 years, all of whom had weakness in their oral language skills. No other demographic information is provided.

MeasuresLanguage skills

Grammatical skills were measured using the Clinical Evaluation of Language Fundamentals (CELF) Preschool II UK Sentence Structure, The Renfrew Action Picture Test (Grammar Score and Information Score) and the CELF Preschool II UK Word Structure (all direct assessment).

Vocabulary knowledge was measured using the CELF Preschool II UK Expressive Vocabulary test (direct assessment).

Listening comprehension was measured by children listening to two short stories and answering questions about them (direct assessment).

Narrative skills were measured using a story retelling task (Squirrel Story) to derive three scores: mean length of utterance in words (MLUw), the number of words used (NW) and the number of different words used (NDW) retelling the story (direct assessment).

The vocabulary taught in the Nursery intervention was measured using Expressive Picture Naming and Receptive Picture Selection (direct assessment).

The vocabulary taught in the Reception intervention was measured using Picture Naming and Definitions task (direct assessment).

Phonological awareness

Onset awareness was measured using an Alliteration Matching task (Carroll & Snowling, 2001) (direct assessment).

Phenome awareness was measured using the York Assessment of Reading for Comprehension (YARC) Sound Isolation task and the Sound Linkage Segmentation, Blending and Deletion task (both direct assessment).

Literacy skills

Literacy skills were measured using a letter-sound knowledge task, The YARC Early Word Reading task and a reading test based on the YARC beginner passage and spelling responses (direct assessment).

General cognitive ability

Nonverbal ability was measured using the Wechsler Preschool and Primary Scale of Intelligence (WPPSI III UK) (direct assessment).

Findings

This study identified statistically significant positive impact on a number of child outcomes.

At post-test and 6-month follow-up:

- Oral language (composite of vocabulary, grammar and listening comprehension)
- Narrative skills
- Phenome awareness.

At 6-month follow-up only:

- Reading comprehension.

The conclusions that can be drawn from this study are limited by methodological issues pertaining to unequivalent groups, hence why a higher rating is not achieved.

Other studies

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

Haley, A., Hulme, C., Bowyer-Crane, C., Snowling, M. J., Fricke, S. (2017). Oral language skills intervention in pre-school - a cautionary tale. *International Journal of language & communication disorders*, 52: 71–79

Guidebook

The EIF Guidebook provides information about early intervention programmes that have at least preliminary evidence of achieving positive outcomes for children. It provides information based on EIF's assessment of the strength of evidence for a programme's effectiveness, and on detail about programmes shared with us by those who design, run and deliver them.

The Guidebook serves an important starting point for commissioners to find out more about effective early interventions, and for programme providers to find out more about what good evidence of impact looks like and how it can be captured. As just one of our key resources for commissioners and practitioners, the Guidebook is an essential part of EIF's work to support the development of and investment in effective early intervention programmes.

Our assessment of the evidence for a programme's effectiveness can inform and support certain parts of a commissioning decision, but it is not a substitute for professional judgment. Evidence about what has worked in the past offers no guarantee that an approach will work in all circumstances. Crucially, the Guidebook is not a market comparison website: ratings and other information should not be interpreted as a specific recommendation, kite mark or endorsement for any programme.

[How to read the Guidebook](#)

[EIF evidence standards](#)

[About the EIF Guidebook](#)

EIF

The Early Intervention Foundation (EIF) is an independent charity and a member of the What Works network. We support the use of effective early intervention for children, young people and their families: identifying signals of risk, and responding with effective interventions to improve outcomes, reduce hardship and save the public money in the long term.

We work by generating evidence and knowledge of what works in our field, putting this information in the hands of commissioners, practitioners and policymakers, and supporting the adoption of the evidence in local areas and relevant sectors.

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