

<b>PROJECT TITLE</b>	The Nuffield Early Years Language Intervention (NELI) Scale-Up Year 2 Evaluation
<b>DEVELOPER (INSTITUTION)</b>	The University of Oxford
<b>SCALING PARTNERS</b>	The Department for Education The Education Endowment Foundation The University of Oxford The Nuffield Foundation Oxford University Press OxEd and Assessment
<b>EVALUATOR (INSTITUTION)</b>	RAND Europe
<b>PRINCIPAL INVESTIGATOR(S)</b>	Dr Emma Disley
<b>STUDY PLAN AUTHORS</b>	Dr Madeline Nightingale Dr Emma Disley
<b>STUDY DESIGN</b>	Mixed-methods evaluation based on surveys, interviews, and case studies, supplemented by secondary data analysis.
<b>PUPIL AGE RANGE AND KEY STAGE</b>	Pupils in reception classes (ages 4-5)
<b>NUMBER OF SCHOOLS</b>	Approximately 11,000
<b>NUMBER OF PUPILS</b>	94,000

### Study Plan version history

VERSION	DATE	REASON FOR REVISION
1.0	23 March 2022	

## 1. This Study Plan

In comparison to standard evaluations comprising impact and implementation and process evaluations, this study plans follows a less traditional structure. The study plan consists of the following:

- 1. Background and study rationale**
2. section which introduces the Nuffield Early Language Intervention (NELI) scale-up that we are evaluating;
- 3.**
4. Intervention section which introduces the NELI programme;
5. **Scaling** section which sets out the overall approach to evaluating scaling processes;

6. **Research objectives** which outlines the overall study aims and the comprehensive list of evaluation questions;
7. **Research methods and data collection** activities which sets out the overall research design and the analysis methods we will use to address the research questions;
8. **Ethics** section that sets out the ethical considerations related to this study;
9. **Data protection** which sets out the data protection measures put in place for the project;
10. **Study team** which sets out the personnel who will work on the different aspects of the project;
11. Error! Reference source not found. which sets out the risks to the project alongside mitigation strategies;
12. **Timeline for data collection activities** which sets out a high-level timeline of when we will complete different research activities.

## 2. Background and study rationale

Early language skills are important and a key element for predicting educational success (Snowling et al., 2011). Evidence suggests that a large proportion of children are starting school with poorly developed language skills, particularly in areas of deprivation (Social Mobility Commission, 2017). The added health and financial concerns that many families have experienced and continue to experience as a result of COVID-19, may further exacerbate this disadvantage gap (GOV.UK, 2020).

The existing evidence suggests that acquisition of the core language skills occurs in the early years when children are between 1 and 4 years old. Studies have shown that around 30% of children with low language abilities in pre-school continue to experience difficulties into their school years (Snowling et al., 2016, Law et al., 2017). Providing the right support in the early years for these children who have lower language abilities can be essential for reducing this 'language gap'.

NELI has demonstrated its potential to benefit young pupils in need of support with spoken language (Fricke et al., 2013; Sibieta et al., 2016). The most recent independent evaluation, undertaken by a team from RAND Europe, found that reception pupils who took part in NELI made, on average, +3 months more progress in language skills than a group of similar children who did not receive the intervention (Dimova et al, 2020). Given that the attainment gap at the end of Reception year between disadvantaged pupils and their more affluent peers is around 4.3 months, the impact of NELI is significant (EEF, 2018). It offers real promise, and if targeted and scaled effectively, could make an important contribution to closing the disadvantage gap nationally.

This strong evidence base of the potential impact of NELI prompted the Department for Education (DfE) in England to commit £9 million to make NELI available to state-funded primary schools. This was announced as part of the Government's £1bn COVID-19 'catch-up' package announced in June 2020, although even without the special challenges posed by COVID, the strong evidence of the effectiveness of NELI makes it a strong candidate for scaling. In the 2020/2021 academic year the DfE in partnership with the EEF and other delivery partners rapidly recruited and offered NELI to approximately 6,600 state-funded primary schools. Parallel to overseeing the delivery of NELI, the EEF funded RAND Europe as an independent evaluator to provide useful information to delivery partners in the 2020/2021 academic year. The objective of the [first year of the evaluation](#) was to assess and understand the scaling process in a COVID-19 affected environment and to provide recommendations for supporting future scale-up of educational interventions.

In February 2021 the Department for Education (DfE) announced that it will invest an additional £8 million in the second year of the NELI scale up, with the aim of delivering NELI in more schools in the 2021/22 school year. Funding has been made available to schools who did not receive DfE-funded NELI resources in the first year of the scale up in 2020/21.

Between May and July 2021, around 3,500 new schools expressed interest to deliver NELI to the Reception cohort who started school in September 2021. Additional schools were recruited during second period of recruitment happened between September and October 2021. Schools recruited in the second year of the NELI scale up will receive the online training, resources (NELI packs) and ongoing support needed to deliver the programme. It is expected that training in these schools will be completed by the end of December 2021, with delivery of the NELI intervention from January 2022.

Once staff are trained, teachers and schools can choose to continue delivering NELI in the following years using the same resources, although DfE funding will not be provided for delivery in later years. Therefore, schools who have been delivering NELI for the first time in the 2020/21 academic year will be able to continue delivering NELI to the new cohort of Reception pupils starting school in September 2021. These schools can continue accessing the ongoing support in the 2021/22 academic year.

The scale up of NELI in the 2021/22 academic year has been funded by a DfE grant and is delivered by the Nuffield Foundation. For the purpose of delivering NELI the Nuffield Foundation has created a spin-off organisation, Nuffield Foundation Education Ltd, which is partnering with Oxford University Press (OUP). OxEd and Assessment (OxEd) to deliver NELI.

In light of the new funding from DfE for schools delivering NELI in the 2021/2022 academic year, the EEF commissioned an extension of the evaluation conducted by RAND Europe. The second year of the evaluation covers delivery of NELI in the 2021/22 academic year, prospects and challenges for sustainability of NELI in the future (i.e., beyond this academic year) and wider lessons for implementing education interventions at scale (objectives and research questions for the second year of the evaluation can be found in Section 5).

### 3. Intervention

**Why:** NELI is an intensive targeted support programme delivered by school staff (usually teaching assistants (TAs)) and designed to improve the spoken language ability of young children with relatively poor spoken language skills. The sessions focus on improving children's vocabulary, listening, narrative skills, and phonological awareness. NELI aims to improve children's oral language skills and early word/emergent reading skills with the ultimate goal of improving children's reading comprehension (as learning to read builds on oral language skills).

**Who (recipients):**

**Pupils:** NELI is designed to be delivered to the 3-6 children with the lowest language skills in each classroom. Schools that accepted the offer to take part in NELI were advised to use LanguageScreen<sup>1</sup> to test and identify the children with lowest language skills in their Reception cohort. However, the use of the test was not mandatory. Children could be selected based on teacher/TA professional judgement.

In the 2020-2021 academic year, approximately 6,650 schools accepted the offer to deliver NELI to pupils to their Reception cohort pupils. In the 2021-2022 academic year,

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<sup>1</sup> LanguageScreen is a school-administered app-based assessment of oral language skills. For more information, see <https://languagescreen.com/>

approximately 4,200 new schools accepted the offer to deliver NELI to pupils to their Reception cohort pupils. This means that almost 11,000 schools in total have signed up to deliver NELI to pupils.

During the recruitment in the first year of NELI delivery at scale (2020-2021 academic year), schools with a higher proportion of FSM pupils (starting with schools in the top quartile based on FSM %) were offered the programme first. In the second year of delivery (2021-2022 academic year), recruitment was open to all schools in England, with outreach activities targeted at:

- Schools in local authorities (LAs) that are in the bottom third based on LA Ofsted ratings;
- Schools with higher than average share of FSM pupils; and
- Schools in Opportunity Areas (OAs).

**School staff:** TAs and teachers in reception benefit by receiving online training that can enhance their oral language teaching practice.

**What (physical or informational materials were used in the intervention):** The intervention is delivered using resources available from Oxford University Press.<sup>2</sup> These include handbooks with detailed lesson plans, picture cards, resources that can be photocopied to use in sessions, and a puppet to support session delivery. Schools also benefited from access to the LanguageScreen assessment. They could administer LanguageScreen free of charge to all Reception pupils both before and after NELI delivery. Schools that accepted the offer received the needed materials for delivery in autumn 2021.

**What (procedures, activities are being used):**

Training and support to teachers, TAs and schools.

- (1) Online training. Prior to NELI implementation, TAs, teachers and other school staff involved in the delivery take part in online training. School staff can access the NELI course after they receive an invitation by email. As mentioned, in previous trials, school staff were trained face-to-face. The online training was developed and piloted by Oxford University. The development and pilot of the online model was funded by EEF and ICG, with the aim to support scale-up of promising projects. In 2020-2021 it was hosted by Oxford University on the FutureLearn<sup>3</sup> platform; in 2021-2022 it is hosted on FutureLearn by OxEd and Assessment. The course is designed to be accessed at any time and completed in a self-paced manner. Materials are provided online which the TA or teacher reads and engages with. Materials include video clips, items to read, quizzes and the opportunity to post questions and receive a response from moderators who are experts in NELI, as well as other learners.

The online training involves a series of 3 linked courses, two which are completed before delivery and a final short course undertaken at the midpoint of programme delivery to pupils. It takes around 10 hours to complete all modules of the training.

Reception teachers, TAs and any other school staff involved in the delivery of NELI complete course 1 and then the TA (or other staff member who will deliver NELI sessions) completes the rest of the courses. Class teachers are asked to participate in course 1 of the training so that they can understand the importance of the intervention and support the TAs when required (for example, by letting the TAs work

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<sup>2</sup> Oxford University Press, NELI webpage. As of 12/04/2021:  
<https://global.oup.com/education/content/primary/series/nuffield-intervention/?region=international>

<sup>3</sup> FutureLearn is a digital education platform. For more information, see <https://www.futurelearn.com/>.

with the selected children during class time). The objectives of the three courses are described in the box below.

### **Box 1: Overview of the NELI training course**

#### **NELI training course 1: Language Fundamentals**

The first course is designed to enhance teachers' and TAs' understanding of what oral language is, why it is so important for children to have good language skills and how to identify children in Reception classes for the programme. Staff find out about the programme itself, the critical role that teaching assistants play in delivering NELI and familiarise themselves with some of the key teaching strategies used in the programme to support the development of good oral language skills. By the end of the training, staff will be in a good position to begin the NELI programme and to support Reception children, particularly those with weak oral language skills, in developing the language skills that will be critical to their success in school and beyond.

#### **NELI training course 2: Delivering the intervention**

This second course is aimed at only the staff who will deliver the NELI programme to children, usually a teaching assistant. But this course is also open to Reception class teachers and NELI project leads. The course focusses on how to deliver the NELI programme effectively. In the course learners are taken through the structure of the NELI Programme followed by a deep dive into each of the two different types of session in NELI – the small group sessions and the individual sessions. Learners also examine the different elements that make up each type of session, which run consistently through the programme, and are familiarised with all the course materials and how to use them. By the end of this course, school staff should be confident in their ability to deliver NELI to the children.

#### **NELI training course 3: Teaching Letter-Sound knowledge and Phonological awareness**

This is the last training course for NELI, which should be completed by TAs before beginning to deliver Part 2 of the NELI programme. The short course introduces TAs to a new element of NELI which will be incorporated into Group and Individual sessions in Part 2 of the programme, providing the tools needed to support NELI children in developing their letter-sound knowledge and phonological awareness. Topics covered include: difference in programme structure between Part 1 and 2; terminology in letter-sound knowledge and phonological awareness and; key teaching strategies for letter sound knowledge, blending and segmenting activities.

- (2) Remote support. Additional remote support is made available through the **Delivery Support Hub**, also hosted on FutureLearn. The NELI Delivery Support Hub is available to school staff that have completed the second NELI online training course.

The support on the Hub takes the form of discussion, query forums and videos. It includes 'See NELI in action' videos that show real life sessions delivered by an experienced NELI practitioners. The Hub is divided into different sections that provide extensive information about various aspect of delivery including the individual and group sessions, practical information on how to time the NELI sessions, on how to track progress, teaching techniques and good practices, and practical matters.

For schools delivering NELI for the first time in the 2021-2022 academic year, additional support is available via the website [www.teachneli.org](http://www.teachneli.org). A live chat support function for schools is available through the LanguageScreen and techneli websites.

In addition to the support provided in the Hub and via the teachneli website, there are regular email communications with schools containing information conducive to the effective delivery of NELI.

- (3) **Mentors.** During implementation, if information is not available on the Hub or training schools can contact NELI mentors, who will be able to provide answers. NELI mentors are specialist speech and language professionals that offer guidance and support to schools as they deliver the programme. Schools can communicate with mentors via posting messages on the FutureLearn platform. The team of NELI mentors maintain an ongoing relationship with participating schools via the online forum.

### Delivery of NELI to children

NELI comprises group and individual sessions. The sessions encourage active participation between children and the TA. Lessons are designed around activities that support and reinforce narrative, vocabulary, listening, letter-sound knowledge, and phonological awareness skills.

- (1) **Group sessions:** All NELI sessions follow a similar structure. The elements of the group sessions and the time allocated to each element is presented in Table 1. Part 1 (week 1 to 10) and Part 2 (week 11 and 20) sessions are similar but it can be seen from the table below that letter-sound knowledge and phonological awareness activities are only included in the second part of NELI. At the beginning of the NELI group sessions TAs reinforce previously learned vocabulary and introduce new words in a context familiar to the children. Each session includes narrative tasks, which focus on skills such as storytelling by using the newly learned vocabulary.

**Table 1 group session breakdown**

Activity	Purpose	Part 1 (weeks 1-10) Time (mins)	Part 2 (weeks 11-20) Time (mins)
<b>Introduction</b>	Give greetings, discuss day of the week, revise Listening Rules, settle children into session, play listening games	3	2
<b>Letter-sound</b>	Introduce new letter	N/A	3
<b>Reinforcement</b>	Reinforce vocabulary taught in the previous session, for example using flashcards	5	4
<b>Vocabulary</b>	Introduce new vocabulary, use flashcards	5	5
<b>Narrative</b>	Work to improve narrative skills further, including sequencing and knowledge of story elements	10	9

<b>Plenary</b>	Sequence and revise session, award Best Listener	2	2
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**Source:** *NELI Teaching Handout book Part 1 – detailed information and plans for implementing NELI, p.20* and *NELI Teaching Handout book Part 2, p.27*

- (2) **Individual sessions:** Individual sessions are tailored to the specific need of each participating child, but the logic of NELI applies with no school or pupil variation. They offer an opportunity to focus on the child’s language need. Planning for the individual sessions is informed by the progress on the group sessions. Similar to the group sessions, each individual session follows a similar structure. The breakdown by activity and time is presented in **Table 2** below.

**Table 2 Individual session breakdown**

<b>Activity</b>	<b>Purpose</b>	<b>Time (mins)</b>
Introduction	Get the child settled into the session	2
Vocabulary revision	Revise vocabulary covered in previous sessions by focusing on words that the child found difficult	5
Narrative	Monitor child’s progress in storytelling	5
Plenary	Revise session and give the child a reward sticker	3

**Source:** *NELI Teaching Handout book Part 1 – detailed information and plans for implementing NELI, p.25*

**How:** NELI sessions should be delivered within the school in a quiet area (such as class, library, staff room, or dining room). TAs have the freedom to decide on a suitable place for session delivery.

**When and how much:** NELI is designed to complement the language and literacy lessons for Reception pupils rather than to replace them. It is recommended to deliver NELI during the normal classroom hours but requires children selected into the programme to be taken out of classes. The programme is delivered over 20 weeks.

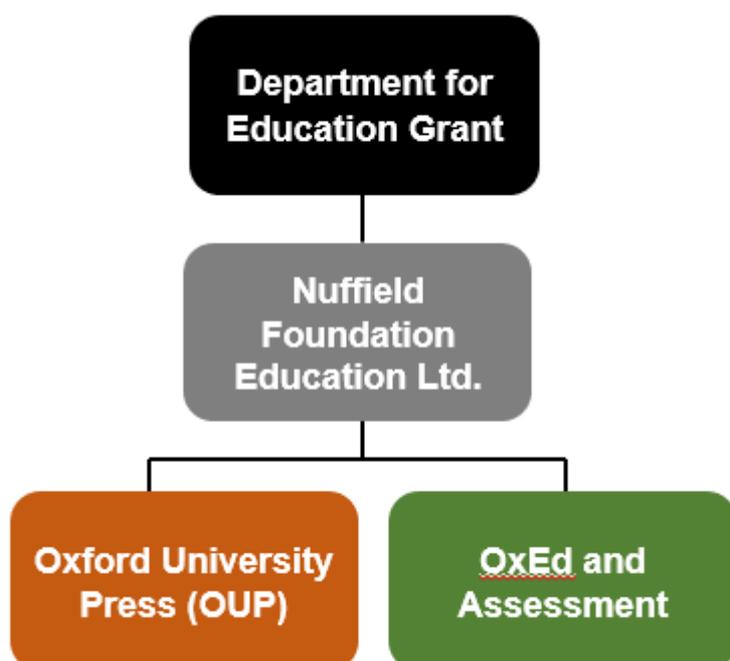
Each week, TAs hold group and individual sessions with those children selected to take part in NELI. TAs normally deliver three group sessions in a week lasting 30 minutes each. Children selected to participate in NELI also attend two 15-minute individual sessions each week. Group sessions and individual sessions generally do not take place on the same day.

**Who (delivery providers, implementers):** The scale up of NELI for the 2021-2022 academic year has been funded by DfE grant to the Nuffield Foundation Education Ltd and it relies on number of delivery partners and funders<sup>4</sup> as demonstrated in Figure 1.

<sup>44</sup> The role of some delivery partners in the second year of the NELI scale-up (2021/2022 academic year) differs from the first year (2020/2021 academic year), where delivery was overseen by the EEF, recruitment was funded and delivered by the Department for Education (DfE), Oxford University

- **The programme** was developed by a team of researchers at the University of Oxford (led by Charles Hulme and Maggie Snowling) together with team members from Sheffield (Silke Fricke) and York (Claudine Bowyer-Crane). The intervention development was funded by the Nuffield Foundation.<sup>5</sup>
- Recruitment to the scale up in the academic year 2021/2022 was delivered by the Nuffield Foundation Education Limited and OUP.
- **The programme resources** were produced and distributed to participating schools by **OUP**.
- **The online staff training** was developed by Oxford University and hosted on the FutureLearn platform. The piloting of the online training was funded separately. It was financially supported by ICG and EEF. The delivery team at Oxford is led by Professor Charles Hulme and Dr Gillian West.
- **The additional support** to delivery is provided by a team of mentors managed by OxEd and Assessment, interacting with trainees via the online training courses and Support Hub hosted on the **FutureLearn platform**.
- **The screening of children** with the aim to identify target pupils is provided via the LanguageScreen app from **OxEd and Assessment**.
- The **evaluation** of the NELI scale up for the 2020-2021 and 2021-2022 academic year is **funded by the EEF**.

*Figure 1 NELI scale-up delivery partners for the 2021-2022 academic year*



coordinated training and support and PCQ worked with OxEd and Assessment to provide support for schools using the LanguageScreen app.

<sup>5</sup> Nuffield Foundation webpage. As of 12/04/2021: <http://www.nuffieldfoundation.org/>

## 4. Scaling

The delivery of NELI is an act of scaling-up a proven intervention, previously delivered in a small number of schools, so that it can be delivered in thousands of schools across the country.

While the delivery of the NELI programme in the classroom is unchanged compared to the trials, there are a number of key activities that are linked to the aim of delivering bigger scale. For example:

- Developing online training, rather than face to face training
- Offering remote support in the form of proactive emails, the NELI Delivery Support Hub/NELI mentors and the teachneli and languagescreen website.
- Forming a consortium to bring NELI to scale and to determine the scaling approach
- Investing resources to target schools – including making schools aware of the possibility of delivering NELI and the process of supporting schools in the recruitment process
- The logistics of producing and distributing the NELI packs to schools
- Recruiting mentors
- Managing the scaling programme and coordinating between the delivery partners
- Managing information about participating schools (for example, their progress through the stages of recruitment, whether packs had been received, whether the training had been accessed etc.)

## 5. Research objectives and questions

The second year of the NELI scale-up evaluation aims to capture and understand (evaluate) the process of implementing and delivering NELI **in two different groups of schools**

- **Cohort 2 Schools** who are recruited to deliver NELI for the first time in the 2021/22 academic year (hereafter referred to as Cohort 2 schools, delivering only to cohort 2 pupils).
- **Cohort 1 Schools** who were recruited to deliver NELI for the first time in the 2020/21 academic year and are choosing to deliver NELI to a new cohort of Reception pupils who started school in the 2021/22 academic year (hereafter referred to as Cohort 1 schools, delivering to cohort 2 pupils and possibly cohort 1 pupils – see below.).

Depending on when the programme began some Cohort 1 schools may be delivering NELI according to the extended delivery plan<sup>6</sup> i.e. to Cohort 1 pupils. The process of implementing NELI according to the extended delivery plan is already included in the (ongoing) first evaluation of the NELI Scale up, and so delivery of NELI to pupils in Year 1 will **not** be included in this evaluation extension.<sup>7</sup>

Some of the characteristics of the NELI offer made in 2021/22 to Cohort 2 schools differ with the offer made to Cohort 1 schools in 2021/22 academic year. The key characteristics are summarised in Table . The topic areas of evaluation for the different groups of schools (Cohort 1 and Cohort 2) are summarised in the same table and are discussed in more detail in the evaluation questions and topic areas section, below.

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<sup>7</sup> For more information see the study plan for the evaluation of the NELI scale up in 2020/21.

**Table 3 Population and topic areas of the NELI Scale up evaluation in Year 2**

<b>School cohort</b>	<b>Pupil cohort</b>	<b>Key characteristics of the NELI offer in the 2021/22 academic year</b>	<b>Topic areas of evaluation</b>
<p>Schools that registered to deliver NELI for the first time in the 2020/21 academic year (<b>Cohort 1 schools</b>):</p>	<p>Pupils who started NELI in the 2020/21 academic year but are completing it in the 2021/22 academic year due to Covid-related disruption (<b>Cohort 1 pupils</b>) Reception pupils in the 2021/22 academic year (<b>Cohort 2 pupils</b>)</p>	<ul style="list-style-type: none"> <li>- No mandated delivery plan, delivery timetable determined by school;</li> <li>-Schools could nominate additional staff to complete the training if new staff joined the school;</li> <li>-Schools could request additional NELI packs;</li> <li>-Schools can access LanguageScreen with no cost, but access was limited to September at the earliest onwards;</li> <li>-Delivery can start at any point in the 2021/22 academic year.</li> </ul>	<ul style="list-style-type: none"> <li>- Perceived impact of NELI (Topic area 3);</li> <li>- The sustainability of NELI after the current funding provided to schools ends (Topic area 5).</li> </ul>
<p>Schools that registered to deliver NELI for the first time in the 2021/22 academic year (<b>Cohort 2 schools</b>)</p>	<p>Reception pupils in the 2021/22 academic year (<b>Cohort 2 pupils</b>)</p>	<ul style="list-style-type: none"> <li>- No cost for schools to access the NELI resources, online training, LanguageScreen;</li> <li>- More responsibilities on the NELI lead in terms of programme co-ordination;</li> <li>-Delivery is anticipated to start in Spring 2022.</li> </ul>	<ul style="list-style-type: none"> <li>- School recruitment and reach in 2021/22 (Topic area 1);</li> <li>-Fidelity of delivery (Topic area 2);</li> <li>-Perceived impact of NELI (Topic area 3);</li> <li>- Transition of scale-up approach from NELI in 2020/21 to NELI in 2021/22 including adaptations (Topic area 4);</li> <li>-The sustainability of NELI after the current funding provided to schools ends (Topic area 5).</li> </ul>

The Year 2 evaluation aims to fulfil **five core** objectives:

1. To assess and understand the processes and effectiveness of recruiting Cohort 2 target schools.
2. To assess and understand the delivery of NELI at scale in schools recruited in 2021/22 academic year
3. To assess the perceived impact of NELI on pupils' language skills and on TAs/teacher skills and knowledge for teaching language and early literacy skills in Cohort 1 and 2 schools;
4. To capture lessons (for NELI delivery partners and others responsible for similar scaling-up activities) to support scaling of education interventions in the future;
5. To assess and understand prospects and challenges for the sustained delivery of NELI in Cohort 1 and 2 schools.

Box 2 sets out the Research Questions for this study. These questions fall into the following five overarching topic areas (which are themselves aligned to the five research objectives as listed above):

Topic area 1: **School recruitment and reach in 2021/22** focuses on the strategies used to ensure that adequate numbers of Cohort2 schools are recruited and supported to deliver NELI in the 2021/22 academic year. This topic will also explore variations in the take up of NELI by Cohort 2 schools according to characteristics such as: share of FSM pupils, LA Ofsted ratings (in particular looking at take up among schools in bottom third of LAs), and take up by schools in OAs.

Topic area 2: **Fidelity of delivery of NELI** examines how schools recruited to deliver NELI for the first time in the 2021/22 academic year are implementing NELI and what are the barriers and enablers to the effective adoption of the intervention among. In contrast to the first NELI Scale up evaluation in 2020/21, the current evaluation will assess fidelity in the context of delivery unaffected by the movement to remote learning as a result of the COVID 19 pandemic. This topic is concerned with adherence to the key elements of NELI in the school, the scope and rate of participation and the degree to which staff engage with the NELI approach.

Topic area 3: **Perceived impact** in (i) Cohort 2 schools and (ii) Cohort 1 schools that continued delivering NELI to the next cohort of Reception pupils. This topic area aims to understand the impact of NELI on the outcomes of interest i.e. on children's language skills and on school staff knowledge and confidence. Impact will be assessed from the perspective of teachers and TAs involved in the delivery of NELI through data collected via surveys and interviews. This topic also includes looking at any wider impacts on the school as a result of delivering NELI.

Topic area 4: **Transition of scale-up approach from NELI in 2020/21 to NELI in 2021/22 including adaptations** focuses on the strategy used to scale up NELI in 2021/22 and the adaptations made based on the learnings gained from the scale up in 2020/21. This will include capturing insights on: (i) the 'what, who, how and when' of the *practical activities and processes* undertaken so that NELI is delivered in thousands of schools; (ii) the *coordination and management activities* that were planned and actually implemented to scale up NELI; (iii) the ways in which the different *delivery partners worked together*, and; (iv) the *barriers and facilitators* to scaling up NELI in 2021/22.

Topic area 5: **The sustainability of NELI after the current funding provided to Cohort 1 and Cohort 2 schools ends.** This focuses on understanding the prospects and challenges for sustainment of the intervention in schools for delivery to future cohorts of Reception pupils. The evaluation questions under this topic area aim to understand the factors that are critical for sustained delivery in schools, and how sustainable scale up of all aspects of NELI can be attained (e.g. training, ongoing support, LanguageScreen). We will examine whether Cohort 1 schools who were delivering NELI in 2020/21 continued to deliver NELI to the new cohort of reception pupils and the barriers and enablers for doing so. We will investigate whether Cohort2 schools express an intention to deliver to future cohorts of Reception pupils. We will

also explore, using interviews and focus groups, the stakeholder perceptions of barriers and enablers to sustained delivery.

### **Box 2 Topic areas for the Year 2 Scale up evaluation with specific research questions**

#### **1. School recruitment and reach in 2021/22**

- 1.1. Why were recruited Cohort 2 schools attracted to NELI – what was the reason they signed up?
- 1.2. To what extent were the intended number of Cohort 2 Schools recruited?
- 1.3. To what extent do the recruited Cohort 2 schools reflect the intended characteristics (in terms of FSM/ Ofsted rating etc.)? If not, why?
- 1.4. What were the main barriers to recruitment of Cohort 2 schools?
- 1.5. What was the experience of Cohort 2 schools from sign-up to delivery?
- 1.6. What changes were made to recruitment processes in 2021/22 compared to 2020/21? Why were they made? To what extent did changes make the recruitment process more effective?

#### **2. Fidelity of delivery of NELI within Cohort 2 schools**

- 2.1. Were all the aspects of the intervention delivered as intended in Cohort 2 schools? If not, why and what remedial action can or could be taken?
- 2.2. Were the delivery partners able to successfully monitor and address any delivery issues in Cohort 2 schools?
- 2.3. Did staff in Cohort 2 schools feel confident and well supported to deliver the intervention?
- 2.4. Did the intervention reach the intended pupils in Cohort 2 schools? If no, why not?

#### **3. Perceived impacts of NELI in Cohort 1 and Cohort 2 schools**

- 3.1. What is the perceived impact of NELI on Reception pupils' language skills in Cohort 1 and Cohort 2 schools, based on teachers' and TAs' perceptions?
- 3.2. What is the perceived impact of NELI on Reception pupils' confidence in their use of language in Cohort 1 and Cohort 2 schools, based on teachers' and TA's perceptions?
- 3.3. What is the perceived impact of NELI on TAs/teacher knowledge of teaching language and early literacy skills to Reception pupils in Cohort 1 and 2 schools, based on teachers' and TAs' views?
- 3.4. What differences (if any) in the perceived impact of NELI on Reception pupils' language skills and confidence, as well as TAs/teacher knowledge of teaching language and early literacy skills to Reception pupils, can be observed between Cohort 1 and Cohort 2 schools?
- 3.5. What are the perceived impacts on the school of delivering NELI in terms of:
  - 3.5.1. Approaches to teaching language and literacy
  - 3.5.2. Approaches to teaching other subjects
  - 3.5.3. Use of TAs
  - 3.5.4. Approach to using evidence/research for decision-making .
  - 3.5.5. Other impacts identified by schools

#### **4. Transition of scale-up approach from NELI in 2020/21 to NELI in 2021/22 including adaptations**

- 4.1. What changes or adaptations (if any) to the scale up approach used in 2020/21 were made for scaling up NELI in 2021/22? For example, in relation to: communications with schools; systems for monitoring and record-keeping; the format, content and delivery mode of training; the distribution of materials; format, content and delivery mode of support for schools via online platforms and mentors, the roles played by the delivery partners.
  - 4.1.1. Why were these changes made?

4.1.2. What were the processes for identifying and implementing changes to the scale up approach?

4.2. What were the roles and responsibilities of the delivery partners involved in the second year of the scale up in 2021/22, and to what extent did the delivery partners work together effectively?

4.3. What were the barriers and facilitators to achieving the intended scale of implementation of NELI in 2021/22, including any impacts from COVID-19?

4.4. To what extent was the approach and process of scale up in 2021/22 effective, according to the perception of schools and delivery partners?

4.5. What lessons can be drawn for others intending to implement similar programmes in a similar number of schools within similar timeframes?

#### **5. The sustainability of NELI after the current funding provided to Cohort 1 and Cohort 2 schools ends**

5.1. Have Cohort 1 schools recruited in 2020/21 continued to deliver NELI in the 2021/22 academic year? If so:

5.1.1. Why did schools decide to continue delivery (or not to continue delivery)?

5.1.2. What were the barriers and enablers of continued delivery to Reception pupils in Cohort 1 schools if staff delivering were new to the NELI?

5.1.3. What were the barriers and enablers of continued delivery to Reception pupils in Cohort 1 schools if staff delivered NELI in the 2020/21 academic year? What resources and support were needed to continue delivery?

5.1.4. What changes or adaptations did Cohort 1 schools make when delivering NELI to Reception pupils in the 2021/2022 academic year and why?

5.2. To what extent do Cohort 1 and Cohort 2 schools intend to continue to deliver NELI in the next 2022/23 academic year?

5.2.1. Why/ why not?

5.2.2. What were the expected barriers and enablers?

5.2.3. What resources and support do Cohort 2 schools think they will need to continue delivery?

## **6. Research methods and data collection activities**

To achieve the core objectives of the study, and ultimately provide evaluation insights that can inform future scale ups in education, we have developed a comprehensive process evaluation. The overall approach can be characterised as:

*An implementation and process evaluation:*

The evaluation will look at the implementation and operation of NELI in Cohort 1 and Cohort 2 schools.

*A formative evaluation involving regular feedback:*

The evaluation findings will be fed back to the EEF and delivery partners at points throughout the study to inform and improve the implementation and operation of the intervention.

*Based on the Theory of Change for NELI scale-up:*

The evaluation will be based on the logic model for the NELI scale up as developed as part of the first Scale up evaluation in 2020/21. Building on discussion at a set up meeting and initial interviews with the delivery partners the evaluation team will revisit and refine the logic model.

Taking a systematic approach, we have mapped data collection methods against the research questions. Table 4 presents an overview of the research methods, data collection activities and sources, the timing of data collection and how this relates to the areas of focus. The evaluation Matrix at the end of the document (see

# Study Plan

## The Nuffield Early Years Language Intervention Scale-Up Year 2 Evaluation

Evaluator: RAND Europe

Principal investigator: Emma Disley



Appendix A: Evaluation Matrix) provides further details, mapping the data collection activities by research question.

The research methods and data collection activities were selected in order to:

- Ensure data are collected from all stakeholders, thus ensuring the evaluation captures multiple perspectives.
- Balance breadth and depth: collect information from all schools delivering NELI (via online surveys), complemented with in-depth data collection from a smaller number of case study schools
- Collect data at several timepoints with the aim of capturing the scaling journey throughout the evaluation period to allow exploration of issues arising.

To answer the research questions we will triangulate across different data sources. We aim to draw together the evidence from the surveys, case study interviews and interviews with scaling partners together.

**Table 4: Research methods overview**

Research methods	Data collection period	Specific data collection methods	Participants/ data sources (type, number)	Data analysis methods	Area of focus addressed
Interviews with delivery partners involved in Year 2	Two rounds: 1. January 2022 2. August 2022	Semi structured interviews	OxEd team, Nuffield Foundation, DfE, OUP	Thematic analysis, deductive coding	1,2,4,5
School staff survey for Cohort 2 schools	November/ December 2021	Online questionnaires	School staff (TAs/teachers, Headteachers, NELI leads), all Cohort 2 schools	Descriptive statistics, frequency counts	1,2,3,4, 5
School staff survey for Cohort 1 and Cohort 2 schools	June/July 2022	Online questionnaires	School staff (TAs/teachers, Headteachers, NELI leads), all Cohort 1 schools	Descriptive statistics, frequency counts	1,2,3,4, 5
Interviews in case study schools	Two rounds: 1. January/Febr	Semi structured telephone interviews	School staff, 20 schools	Thematic analysis, deductive coding	1,2,3,4, 5

	uary 2022 2. June/J uly 2022				
Secondary data analysis: Recruitment and reach data	July/August 2022	Data collected by Nuffield Foundation / through the teachneli platform	All schools	Descriptive statistics	1, 4
Secondary data analysis: delivery partner survey	July/August 2022	Data collected by Nuffield Foundation	, NELI leads all schools	Descriptive analysis	2

## Collection and analysis of primary data

*Surveys with TAs, reception teachers, heads and NELI leads in all schools who were willing to be contacted about the evaluation (Three rounds).*

Surveys are the best method for collecting data from all schools that agreed to take part in the evaluation of the NELI scale-up.

Survey questionnaires are developed by the project team at RAND Europe in consultation with the delivery partners. Each question in the survey can be mapped onto a specific research question. Survey questions will be tailored to the school's involvement in NELI (Cohort 1/Cohort 2 school). Surveys will be kept as short as possible (we expect that they will take no more than 15 minutes to complete).

Survey data will be collected at two different time points:

- Around the end of the onboarding phase<sup>8</sup> in November and December 2021 with Cohort 2 schools;
- Around the end of the delivery phase<sup>9</sup> in June 2022 with Cohort 1 and 2 schools.

### *School staff survey: Cohort 2 schools Nov and Dec 2021*

In order to capture the perceptions of the **NELI Leads, head teachers, Reception teachers, and TAs** in **schools recruited to deliver NELI for the first time in 2021/22**, we will administer the first **staff survey** across these staff groups before delivery begins through a brief online survey (lasting a maximum of 15 minutes).

This will capture the views of school staff on topics including:

- The school's experience registering to the programme
- the online NELI training programme (courses 1 and 2 specifically in this first survey)

<sup>8</sup> During the onboarding phase (Sept-Dec 2021) schools are required to identify staff to take part in NELI delivery. The staff involved are then required to complete NELI training courses 1 and 2 and to select pupils to receive NELI using the LanguageScreen assessment.

<sup>9</sup> Schools can start delivering the programme to pupils as soon as staff have completed the online training programme on FutureLearn, identified which pupils will participate in NELI using LanguageScreen and received the physical NELI resources (NELI kit). Schools are advised to start the programme in January 2022 to ensure they can complete the 20-week programme

- the ongoing support (i.e. NELI Mentor team, NELI Delivery Support Hub)
- the usefulness of the NELI resources (i.e. the NELI pack)
- NELI delivery activities (i.e. the use of LanguageScreen;<sup>10</sup> the process for selecting Reception pupils to take part in NELI; early insights on school's progress with delivering NELI sessions at this point in time, if appropriate).

The survey will be administered in late and December November 2021.

### *School staff survey: Cohort 2 schools Jun/ Jul 22*

The team will conduct a **second staff survey** at the end of the implementation phase with the target groups (NELI leads, teachers and TAs) in Cohort 2 schools. The survey will gather new insights on:

- the online NELI training programme (course 3)
- the ongoing support
- NELI resources
- school progress with NELI delivery activities (i.e. use of LanguageScreen, the selection of Reception pupils, NELI session delivery)
- Fidelity of delivery
- perceptions of the impact of NELI on participating pupils and TAs/teachers delivering the programme
- the school's future plans for delivering NELI to the next cohort of Reception pupils (i.e. in the 2022/23 academic year).

The second staff survey to Cohort 2 schools will be administered in June/July 2022.

### *School staff survey: Cohort 1 schools: Jun/ Jul 22*

The survey administered to **NELI Leads, head teachers, Reception teachers and TAs** in **Cohort 1** schools<sup>11</sup> will follow a similar high-level scope as for Cohort 2 schools where relevant. Indeed, we will focus on gathering insights from these schools on:

- NELI delivery activities
- Fidelity of delivery
- barriers and enablers to continued delivery to Reception pupils if the staff member has recently been trained to deliver NELI in the 2021/22 academic year
- barriers and enablers of continued delivery to Reception pupils if staff was trained and delivered NELI in the 2020/21 academic year
- perceptions of the impact of NELI on participating pupils and TAs/teachers delivering the programme
- future plans for delivering NELI to the next cohort of Reception pupils (i.e. in the 2022/23 academic year).

The second staff survey to Cohort 1 schools will be administered in June/July 2022.

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<sup>10</sup> We consider that it will be useful and important to explore in detail how LanguageScreen is being used in this evaluation of the NELI scale up, as our understanding is that schools subscribed to LanguageScreen in 2021/22 will receive an unlimited number of tests, which was not the case for schools recruited in the first scale up in 2020/21. We anticipate that this, along with other factors (e.g. a more responsive LanguageScreen app, introduction of two-factor authentication) may lead to important changes in how the assessment is used. For example, it is possible that schools may begin to administer LanguageScreen to pupils in other year groups, given that they now have no limits on the number of times the assessment may be administered. We consider that it will be important to capture any changes in how LanguageScreen is being used in 2021/22 and contextualise these with findings from the evaluation of the NELI 2020/21 scale up.

<sup>11</sup> In addition to this survey, Cohort 1 schools were surveyed three times as part of the first year of the evaluation.

**Case study schools: Interviews with NELI leads, head teachers, teachers and TAs (Two rounds in up to 25 schools): Jan/Feb 2022 ; Jun/Jul 22**

The team will conduct **semi-structured interviews with a sample of 25 case study schools across Cohort 1 and 2 schools.**

We consider that it is particularly important to gather insights from Cohort 2 schools that were recruited to deliver NELI for the first time in 2020/21, which is why we propose to sample 15 Cohort 2 schools and 10 Cohort 1 schools<sup>12</sup> that received NELI for the first time in 2020/21 and continued delivering NELI in 2021/22.

We will aim to interview the same Cohort 2 case study schools at two timepoints, to gather dynamic insights and trace specific journeys through NELI delivery. If schools are unable to participate in both waves of interviews, we will invite additional schools to take part in the second wave of interviews. To maximise participation we will allow long recruitment windows and offer incentives<sup>13</sup> to schools. To utilise responses from the surveys to refine interview protocols, we propose to undertake the case study interviews soon after the surveys (i.e. in February 2022, and in July 2022). Cohort 1 schools will be interviewed in June/July 2022 and data collection as part of the Year 1 NELI scale-up evaluation will provide an over-time comparison for these schools.

We will conduct interviews with **the NELI lead** or another staff member closely involved in delivering NELI in each school. Where possible, we will interview multiple staff members from each school (**head teachers, teachers and TAs etc.**) to provide a more in-depth assessment of schools' experiences and perceptions. We will speak with NELI leads, Reception teachers and TAs in Cohort 1 schools. Furthermore, we would develop separate interview protocols for schools Cohort 1 and Cohort 2 schools, which would follow a similar scope to the corresponding survey administered before the case studies would take place, although exploring these themes in more detail. More information on the scope of these interviews is provided below.

We will apply a purposive stratified sampling approach to select case study schools. We propose to stratify on:

- engagement with NELI delivery (use of LanguageScreen, participation in training)
- geographical region
- target schools
  - o Schools in local authorities (LAs) that are in the bottom third based on LA Ofsted ratings;
  - o Schools with higher than average share of FSM pupils; and
  - o Schools in Opportunity Areas (OAs).

Information gathered in these interviews will be analysed using a general inductive approach. It will enable us to identify relevant themes and/or categories most relevant to the research objectives (Thomas, 2006). A description of the most important themes will be presented in the final report. This will also allow us to further our understanding of how the logic model worked in practice and the conditions needed to make NELI succeed.

Our analysis will include both within case and between case analysis:

- Within case analysis will be carried out first, drawing on data from multiple interviewees and at different time points where available (some schools may be unable to take part in a follow-up interview and/or only one staff member may be able to participate) This will

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<sup>12</sup> Not necessarily the same schools that took part in case study interviews in the first year of the evaluation since these schools may not be taking part in the extended delivery plan and they may not have capacity to take part in interviews.

<sup>13</sup> Schools are offered a £20 Amazon voucher as an incentive to participate in case study interviews and to thank them for their input

allow us to understand the specific journey of each case study school, and locate that in the context of that particular school's location, environment and context.

- Between case analysis will then be undertaken to identify commonalities and differences.

### *Case study interviews in Cohort 2 schools: Jan 22*

As mentioned above, will capture the perceptions of the **NELI Leads, head teachers, Reception teachers, and TAs** via interviews in **15 case study schools from Cohort 2** (each interview lasting a maximum of 30 minutes) just after the first survey has been administered (i.e. the survey of Cohort 2 schools in Nov/Dec 21). The interviews will qualitatively explore similar themes covered in the corresponding staff survey, albeit in more detail.

Specifically, we consider that the case studies in these schools at this timepoint would explore school's experience in registering to the programme as well as staff views on the online NELI training (courses 1 and 2), ongoing support, NELI resources and NELI delivery activities (i.e. the use of LanguageScreen; the process for selecting Reception pupils to take part in NELI; early insights on school's progress with delivering NELI sessions at this point in time, if appropriate).

We will undertake the first round of case study interviews in Cohort 2 schools in March 2022.

### *Case study interviews in Cohort 1 and 2 schools Jun/July 22*

As mentioned above, we would seek to follow up with the same Cohort 2 case study schools during a second round of interviews. The scope of these interviews would largely follow that of the survey in June/July 2022.

Indeed, among the **15 case study schools from Cohort 2**, the second round interviews would seek to gather new qualitative insights on the online NELI training (course 3), ongoing support, NELI resources, school's progress with NELI delivery activities (i.e. LanguageScreen use, selection of Reception pupils, NELI session delivery), the extent to which they perceive that the programme is having an impact on: (i) children's language skills, and; (ii) teachers' and TAs' knowledge of teaching language and early literacy skills and finally, future plans for delivering NELI to the next cohort of Reception pupils (i.e. in the 2022/23 academic year).

The second round of interviews that will be conducted with the **10 selected case study schools from Cohort 1** will follow a similar scope as for the second round case study interviews with Cohort 2 schools. However, they will focus on gathering detailed qualitative insights on ongoing support, NELI resources, NELI delivery activities, their perceptions of the impacts of NELI on participating children and TAs/teachers, the barriers and enablers to continued NELI delivery to the next cohort of Reception pupils and whether any additional support for continued delivery in the 2021/22 academic year was required and provided. We would also explore with these schools their future plans for delivering NELI to the next cohort of Reception pupils (i.e. in the 2022/23 academic year). By asking Cohort 1 schools if they continued to implement NELI with the new Reception pupils in 2021/22 *and* whether they were in a position to do so again in 2022/23, we will learn about the critical conditions needed to achieve sustainable implementation on a slightly longer term basis as well.

We will interview school staff in Cohort 1 and 2 schools in July 2022, at the same time as or shortly after the surveys are administered to school staff in June 2022.

### *Interviews with delivery partners of the NELI scale up in 2021/22 (Jan 22 and Aug 22)*

To supplement the findings from the surveys and interviews, the study team will conduct **semi-structured interviews with the delivery partners**. Our intention will be to conduct these interviews with representatives from:

- Nuffield Education Organisation Ltd,
- Oxford University Press (OUP)

- OxEd and Assessment)
- DfE
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The interviews will explore the different and aligning views and definitions of success among delivery partners with regards to the NELI scale up, as well as any compromises made during the scale up process. Crucially, we will also explore any deviations from the 2020/21 scale up approach in 2021/22 and understand the rationale and processes for implementing any changes or adaptations to the approach.

We will undertake the first round of interviews with delivery partners in January 2022, following up with a second round of interviews at the end of the academic year (August 2022).

## **Collection and analysis of secondary data**

The secondary data analysis will draw on the following sources:

### *Data about school recruitment and reach in Cohort 2 schools*

To add another strand to our evaluation of take up of NELI among Cohort 2 schools recruited in 2021/22, we will analyse school recruitment data collected by delivery partners (the Nuffield Foundation). The data will allow us to validate the criteria and processes for offering NELI to schools and explore any variations in recruitment (e.g. variation over time; or variation determined by school characteristics).

We will collect and analyse these data in July and August 2022.

### *Analysis of delivery partner survey in Cohort 2 schools*

The delivery partners will collect survey data directly from NELI Leads in Cohort 2 schools recruited to deliver NELI for the first time in 2021/22. NELI Lead surveys will be administered at four different timepoints between February and July 2022 to understand and track over time the delivery of NELI at the school level. Data from the surveys can be used to provide useful analyses of school's engagement with, and completion of, NELI delivery across the different timepoints. We will analyse these survey data by region or other key characteristics to understand any variations in the implementation of NELI.

We will collect and analyse these data in July and August 2022.

## **7. Ethics**

The ethics processes are in accordance with the ethics policies adopted by RAND Europe. The evaluation design for the first and second years of the NELI scale-up evaluation (2020-2021) was approved by RAND U.S. Human Subjects Protection Committee (HSPC).

## **8. Data protection**

Data protection is the foremost concern in undertaking our work. Respecting the rights of the individuals engaged in the NELI scale-up is of paramount importance.

We have, in choosing a research design, been mindful that we should impose the minimum burden necessary on schools and school staff including minimising the use of personal data, while aiming to incorporate a variety of diverse perspectives.

RAND Europe will take measures to ensure the evaluation is GDPR compliant. RAND Europe operates in accordance with the Data Protection Act 2018 and EU law including GDPR.

As currently applicable under GDPR, RAND Europe will obtain personal data from schools as data controller. The lawful basis for RAND Europe processing the data under the GDPR is

'legitimate interest'. That is, it has a legitimate interest in processing the data in order to work with the schools that wish to participate in the evaluation of the NELI scale up. The data is collected and processed solely to facilitate voluntary contribution to the project. The data is not excessive and will be used for the purposes of contacting school staff to arrange participation in the surveys and interviews, as required to meet the project goals. The data is necessary for the purpose of the project. We also judge that there is very limited scope for harm as appropriate data handling safeguards have been put in place. As such in considering whether they could rely on legitimate interests as the lawful basis for processing the data, the data controllers have balanced their interests with the interests of the data subjects. The data subjects' data will not be used in any way that could be detrimental to their rights and/or freedoms. On this basis the data controllers have assessed a legal basis of legitimate interests to be applicable.

Individuals targeted by the study have the right to oppose, have access to, rectify, or remove personal or sensitive personal data held by RAND Europe. Participants will be informed about their rights, legal basis, and the manner in which their data will be obtained and processed (providing sufficient detail about the nature, approach, and aim of the research activities in easily accessible way and format, so as to be compliant with the legislation).

RAND Europe will collect consent forms for school staff who will volunteer to participate in an interview. Furthermore, the cover page for each questionnaire survey collected as part of the study will contain an informed consent sheet and privacy notice statements for respondents. It will inform respondents that participation in the survey is entirely voluntary. Also, the surveys will not collect personal identifying information such as the respondent's name, date of birth, or contact details.

Any data sharing required will be governed by the data sharing agreement. The data sharing agreements will (i) define roles for controlling and processing data, (ii) explain data flows and limit sharing data to only essential data, (iii) outline arrangements for the storage, retention or destruction of data. It was agreed with the EEF and delivery partners at the project set-up meeting that data sharing Year 2 of the NELI scale-up evaluation is covered by existing agreements and no specific DSA is required.

Data will be shared securely using specialised encrypted software (e.g. Egress).

In order to ensure GDPR compliance, all data will be only saved on GDPR-compliant, secure servers inside the EEA or U.K. RAND Europe is registered with the Information Commissioner's Office (ICO), registration number Z6947026 and is certified for adhering to ISO 9001:2015 quality management practices. All data shared with RAND Europe will be held and processed in accordance with RAND Europe's data protection policy, data breach procedure and information security policies (all available on request) and using controls outlined in RAND Europe's ISO27001 certification. Controls include data being stored in the EU in password-protected folders which are accessible only to the specific members of the research team. The folders are stored on RAND Europe's servers and special measures will be put in place to ensure that the data is exempt from backups to the US servers, as is standard procedure for other information. Backup files for the data (to mitigate against data loss in the case of a system failure) are kept off-site in a locked safe. RAND Europe implements a 'clean desk policy', in which all non-public documents are kept in locked drawers while the individual researcher is away from their desk, and all non-public printed material is securely shredded after use.

Data that permits the identification of data subjects will be kept for no longer than necessary to process the information collected (and no longer than one year after the end of the contract). The collected personal data will not be used or shared outside each assignment nor transferred to third parties.

## Reporting and dissemination

The following outputs will be produced:

Final study plan year 2	Feb-22
PRESENTATION <sup>14</sup> - year 2 schools only	April -22
First draft final report	Sep-22
Revisions and review of year 2 report	Sep/Dec 22
FINAL REPORT year 2	Dec-22

## 9. Study team

### EVALUATION TEAM: RAND EUROPE

**RAND Europe** is responsible for design of the NELI scale-up evaluation (with input from the EEF team), analysis, reporting, and quality assurance of the evaluation. The evaluation team in RAND Europe comprised: Dr Emma Disley (project leader), Dr Madeline Nightingale (project management), Giovanni Amodeo and Asha Haider. The evaluation team will benefit from advice and quality assurance from Elena Rosa Brown.

## 10. Risks

**Table 5: Risks and mitigation strategies**

Risks	Assessment	Mitigation
Continued pressures on schools stemming from COVID-19 could lead to low levels of participation in the evaluation, delays in data collection and disruption to delivery of NELI.	Likelihood: Moderate; Impact: moderate	If schools do not have capacity to participate in interviews or surveys, the Team will discuss with EEF whether data collection timelines can be adapted.  The research questions specifically probe for the impact of COVID on delivery, so that this important context can be taken into account when interpreting findings.
Not able to capture further changes in roll out plans	Likelihood: Moderate;	Remain flexible and update the design in line with evolving evaluation needs

<sup>14</sup> The presentation will report on initial findings from the first survey round with Cohort 2 schools, case study interviews with Cohort 2 schools and interviews with delivery partner.

	Impact: Moderate	Remain in regular contact with delivery partners
Limited time for data collection	Likelihood: Medium Impact: High	Work closely with EEF and delivery partners Prioritisation of tasks
Not able to engage a representative sample of schools in data collection activities	Likelihood: Medium Impact: High	There is a risk that certain schools (e.g. target schools) may face an extra burden in terms of time and resources to engage due to COVID-19. This can be mitigated by regular liaison with schools and by providing sufficient data collection window
Not able to get agreement on clear, feasible evaluation questions	Likelihood: Low Impact: High	Work closely with EEF to understand what's important Draw on our experience of preparing questions, knowledge of NELI and of the first year of the scale-up evaluation
Low survey response rates from school staff	Likelihood: Moderate Impact: Moderate	Reminders, warm-up emails giving notice, open for 3-4 weeks, accessible by laptop, tablet and phone, clear questions, short (15 mins) survey Real-time monitoring of response rates to allow for reminders to be targeted
Not able to engage regularly with delivery partners	Likelihood: Low Impact: Moderate	Short, efficient, targeted interviews Agree communications plan at inception
Not able to generalise findings and distinguish implications of COVID-context from general lessons for scale-up	Likelihood: Moderate Impact: Moderate	Survey questions to probe this Investigate in interviews and deep dives Remain in dialogue with the delivery teams regarding their views on COVID-19 impact

## 11. Timeline for data collection activities

Date	Activity
<b>Nov/Dec 21</b>	Survey: Cohort 2 Schools (recruitment, training)
<b>Dec 21/ Jan 22</b>	Interviews with delivery organisations involved in year 2
<b>Feb 22</b>	Interviews with case study schools - Cohort 2 (recruitment)



## 12. References

- Barker, P.M., Reid, A. and Schall, M.W., 2015. A framework for scaling up health interventions: lessons from large-scale improvement initiatives in Africa, *Implementation Science*, 11(1), pp.1-11.
- Chowdry, H. and Fitzsimons, P. 2016., 'The Cost of Late Intervention: EIF Analysis 2016', London: *Early Intervention Foundation*.
- EEF (2018), The Attainment Gap, Accessible: [https://educationendowmentfoundation.org.uk/public/files/Annual\\_Reports/EEF\\_Attainment\\_Gap\\_Report\\_2018.pdf](https://educationendowmentfoundation.org.uk/public/files/Annual_Reports/EEF_Attainment_Gap_Report_2018.pdf)
- Dimova S., et al, 2020. The Nuffield Early Language Intervention Evaluation Report. Education Endowment Foundation
- Fielding, L., Kerr, N. and Rosier, P. 2007. Annual Growth for All Students: Catch-Up Growth for Those Who Are Behind, *New Foundation Press*.
- Fixsen, D., Blase, K., Metz, A. and Van Dyke, M., 2013. Statewide implementation of evidence-based programs. *Exceptional children*, 79(2), pp.213-230.
- Fricke, S., Bowyer-Crane, C., Haley, A. J., Hulme, C. and Snowling, M. J. 2013 'Efficacy of Language Intervention in the Early Years', *Journal of Child Psychology and Psychiatry*, 54 (3), pp. 280–290.
- Berry, W.R., Edmondson, L., Gibbons, L.R., Childers, A.K., Haynes, A.B., Foster, R., Singer, S.J. and Gawande, A.A., 2018. Scaling safety: the South Carolina surgical safety checklist experience. *Health Affairs*, 37(11), pp.1779-1786.
- Great Britain. Social Mobility Commission, 2017. Time for change: an assessment of government policies on social mobility 1997-2017.
- GOV UK, 'Early years support package to help close Covid language gap' August 2020. As of 12/04/2021: <https://www.gov.uk/government/news/early-years-support-package-to-help-close-covid-language-gap>
- Law, J., Charlton, J., Dockrell, J., Gascoigne, M., McKean, C., & Theakston, A., (2017), Early Language Development: Needs, provision and intervention for preschool children from socio-economically disadvantaged backgrounds, EEF Evidence Review. Accessible: [https://educationendowmentfoundation.org.uk/public/files/Law\\_et\\_al\\_Early\\_Language\\_Development\\_final.pdf](https://educationendowmentfoundation.org.uk/public/files/Law_et_al_Early_Language_Development_final.pdf)
- Nuffield Foundation webpage. As of 12/04/2021: <http://www.nuffieldfoundation.org/>
- Oxford University Press, NELI webpage. As of 12/04/2021: <https://global.oup.com/education/content/primary/series/nuffield-intervention/?region=international>
- Scaling What Works, 2011. 'How Do We Approach Impact and Evaluation in the Context of Scale?'
- Snowling, M. J., Duff, F. J., Nash, H. M., & Hulme, C. (2016). Language profiles and literacy outcomes of children with resolving, emerging, or persisting language impairments. *Journal of Child Psychology and Psychiatry*, 57(12), 1360-1369.
- Thomas, D.R., 2006. A general inductive approach for analyzing qualitative evaluation data. *American journal of evaluation*, 27(2), pp.237-246
- World Health Organization, 2009. Towards universal access: scaling up priority HIV.

### **13. Acknowledgments**

RAND Europe would like to thank the members of EEF's NELI Scale-Up evaluation team for their useful comments and suggestions to inform and shape this document.

## Appendix A: Evaluation Matrix

	Regular interview with delivery organisations	Surveys of schools, 3 rounds	Telephone interviews with TAs/ Teachers/head teachers, 2 rounds	Analysis of secondary data (recruitment and reach)	Analysis of secondary data (delivery partner survey)
<b>1. School recruitment and reach in 2021/22</b>					
1.1. Why were recruited Cohort 2 schools attracted to NELI – what was the reason they signed up?	X	X	X		
1.2. To what extent were the intended number of Cohort 2 Schools recruited?	X			X	
1.3. To what extent do the recruited Cohort 2 schools reflect the intended characteristics (in terms of FSM/ Ofsted rating etc.)? If not, why?	X			X	
1.4. What were the main barriers to recruitment of Cohort 2 schools?	X	X	X		
1.5. What was experience of Cohort 2 schools from sign-up to delivery?	X	X	X		

1.6. What changes were made to recruitment processes in 2021/22 compared to 2020/21? Why were they made? To what extent did changes make the recruitment process more effective?	X			
<b>2. Fidelity of delivery of NELI within Cohort 2 schools</b>				
2.1. Were all the aspects of the intervention delivered as intended in Cohort 2 schools? If not, why and what remedial action can or could be taken?	X	X	X	X
2.2. Were the delivery partners able to successfully monitor and address any delivery issues in Cohort 2 schools?	X			
2.3. Did staff in Cohort 2 schools feel confident and well supported to deliver the intervention?	X	X	X	X
2.4. Did the intervention reach the intended pupils in Cohort 2 schools? If no, why not?	X	X	X	X
<b>3. Perceived impacts of NELI in Cohort 1 and Cohort 2 schools</b>				
3.1. What is the perceived impact of NELI on Reception pupils' language skills in Cohort 1 and Cohort 2 schools, based on teachers' and TAs' perceptions?		X	X	
3.2. What is the perceived impact of NELI on Reception pupils' confidence in their use of language in Cohort 1 and Cohort 2 schools, based on teachers' and TA's perceptions?		X	X	
3.3. What is the perceived impact of NELI on TAs/teacher knowledge of teaching language and early literacy skills to Reception pupils in Cohort 1 and 2 schools, based on teachers' and TAs' views?		X	X	
3.4. What differences (if any) in the perceived impact of NELI on Reception pupils' language skills and confidence, as well as TAs/teacher knowledge of teaching language and early literacy skills to Reception pupils, can be observed between Cohort 1 and Cohort 2 schools?		X	X	
3.5. What are the perceived impacts on the school of delivering NELI in terms of:				
3.5.1.Approaches to teaching language and literacy		X	X	
3.5.2.Approaches to teaching other subjects				

3.5.3.Use of TAs

3.5.4.Approach to using evidence/research for decision-making .

3.5.5.Other impacts identified by schools

#### 4. Transition of scale-up approach from NELI in 2020/21 to NELI in 2021/22 including adaptations

4.1. What changes or adaptations (if any) to the scale up approach used in 2020/21 were made for scaling up NELI in 2021/22? For example, in relation to: communications with schools: systems for monitoring and record-keeping; the format, content and delivery mode of training; the distribution of materials; format, content and delivery mode of support for schools via online platforms and mentors, the roles played by the delivery partners.

X

X

4.1.1.Why were these changes made?

4.1.2.What were the processes for identifying and implementing changes to the scale up approach?

4.1.3.How are these changes perceived by Cohort 1 schools?

4.2. What were the roles and responsibilities of the delivery partners involved in the second year of the scale up in 2021/22, and to what extent did the delivery partners work together effectively?

X

4.3. What were the barriers and facilitators to achieving the intended scale of implementation of NELI in 2021/22, including any impacts from COVID-19?

X

4.4. To what extent was the approach and process of scale up in 2021/22 effective, according to the perception of schools and delivery partners?

X

X

X

4.5. What lessons can be drawn for others intending to implement similar programmes in a similar number of schools within similar timeframes?

X

X

X

X

#### 5. The sustainability of NELI after the current funding provided to Cohort 1 and Cohort 2 schools ends

5.1. Have Cohort 1 schools recruited in 2020/21 continued to deliver NELI in the 2021/22 academic year? If so:

5.1.1. Why did schools decide to continue delivery?

5.1.2. What were the barriers and enablers of continued delivery to Reception pupils in Cohort 1 schools if staff delivering is new to the NELI?

X X X

5.1.3. What were the barriers and enablers of continued delivery to Reception pupils in Cohort 1 schools if staff delivered NELI in the 2020/21 academic year?

5.1.4. What resources and support were needed to continue delivery?

5.1.5. What changes or adaptations did Cohort 1 schools make when delivering NELI to Reception pupils in the 2021/2022 academic year and why?

5.2. To what extent do Cohort 1 and Cohort 2 2 schools intend to continue to deliver NELI in the next 2022/23 academic year?

5.2.1. Why/ why not?

X X X

5.2.2. What were the expected barriers and enablers?

5.2.3. What resources and support do Cohort 2 schools think they will need to continue delivery?

## Appendix B: FutureLearn NELI training metrics analysis approach

NELI scale up study plan – analysis of FutureLearn training metrics

### PARTICIPATION DATA

FutureLearn data also contains key participation metrics which we can use in this evaluation, specifically:

- Total number of step visits across learners
- Total number of step completions across learners
- Total number of comments posted across learners
- Learner activity, including:
  - o Number of school staff sent course 1 enrolment email (Teachers and TAs)
  - o Number of school staff sent course 2 and delivery hub enrolment email (TAs only)
  - o Number of school staff sent course 3 enrolment email (TAs in March 2020)
  - o Number of additional school staff sent enrolments (post MoU nomination)
  - o Number of school staff registered for course 1
  - o Number of school staff registered for course 2
  - o Number of school staff registered for the delivery hub
  - o Number of school staff registered for course 3 (TAs from March/April 2020)
  - o Number of school staff completed Course 1
  - o Number of school staff completed Course 2
  - o Number of school staff completed Course 3

The first three metrics provide a high level understanding of the raw magnitude or scale of the use of, and engagement with, the online NELI training programme. We will report on these high level statistics to this end.

Using the metrics on learner activity, we then propose to analyse descriptively using tables and graphs participation in NELI training courses 1, 2 and 3 separately, as well as use of the NELI Support Delivery Hub. To do this, we will construct two key measures:

1. **Registration rate:** Defined as the proportion of all school staff who received the enrolment email who subsequently registered for the relevant course or the Delivery Hub.
2. **Completion rate:** Defined as the proportion of all school staff who registered for the relevant training course who then completed that course.

### VIDEO STATISTICS

FutureLearn data on engagement with video content made available in the online NELI training programme is also available for analysis in this evaluation. Specifically, for each video available in the three NELI training courses, information on the course step on which the video is located, the title of the video, and the total number of times it has been viewed is provided. Analysis of this data will provide useful insights on engagement with video content covering particular training themes or topics related to delivering NELI.

We will descriptively analyse through tables or graphs variations in the number of times videos have been viewed within and across the three training courses. Using information on the course step on which the video is located and the title of the video, we will highlight particular training themes or topics where video content was particularly popular (or not) as a resource for learning about how to deliver NELI. We will also explore whether there were any differences in engagement with video content by training course, to understand whether there were particular points in the training programme where video content was especially helpful in preparing for NELI delivery.

### QUIZ/TEST QUESTION RESPONSES

Data collected via FutureLearn on responses to quiz and test questions are available for analysis. Information on the course step on which the quiz or test question is located, the question number, the learner's response, whether that response is correct or incorrect, and a timestamp are available. Analysis of this information will provide useful insights on which aspects of the online NELI training programme were more difficult for learners to grasp, and thus where the training content may need to be modified or additional content be added to sufficiently support learners as they progress through the training programme.

As the first step of our analysis, we will calculate the proportion of correct responses for every question across all quizzes and tests in the three NELI training courses. By doing this we can first assess whether there were any specific training or topic themes that were more problematic for learners to grasp.

Then, we propose to calculate an overall percentage of correct responses by quiz or test by averaging the percentage of correct responses for all individual questions within the same quiz or test. This will allow us to compare the relative difficulty of quizzes and tests by high-level training theme or topic, to understand if there were any specific course steps or themes that were particularly difficult for learners to understand.

Finally, we also propose to aggregate the data further by averaging the proportion of correct responses across all tests and quizzes within each training course, to explore at a high level whether there were any differences in the difficulty of the content across the three NELI training courses. We will calculate course-level proportions of correct responses separately for quizzes and tests, given that quizzes did not contribute to learners' course score.

The metrics produced from this analysis would therefore be:

1. Percentage of correct responses by individual quiz or test question;
2. Averaged percentage of correct responses by quiz or test;
3. Averaged percentage of correct responses across all tests by training course;

4. Averaged percentage of correct responses across all quizzes by training course.

We will undertake descriptive analyses to explore the themes above, using tables and graphs to highlight and explore any variations in the percentage of correct responses by question, quiz/test and training course.

### LEARNER COMMENTS

Learner and Mentor comments, including information on the course step on which the learner or mentor left their comment and the discussion question(s) to which the comment is responding, are available for analysis. Analysis of the comments will provide i) useful insights into learner's views on the course and ii) information on the most common topics discussed among learners.

Given the large amount of comments we will undertake text mining in R to identify the most popular topics that arose in the comments and how learners viewed or perceived the training.

To do this, we will undertake the following analysis:

#### 1. Word frequency of learners' comments

First, we will explore the most common words used by learners and mentors with the aim to understand the most common themes discussed by the same. We will estimate word counts for the total dataset by course (excluding stop words), and by question(s) asked in order to identify overrepresented words. This will show the most used single words, bigrams (pairs of words) and trigrams (groups of three words). We will estimate most common words using the *qdap* package by calling *freq\_terms* functions. The most frequent single words or pairs or triple of words will be presented in frequency plots.

#### 2. Sentiment analysis

Second, a sentiment analysis approach would be undertaken to understand what are the main sentiments using the words counts, through the use of different dictionaries. Sentiment analysis will classify the comments by learners and mentors as positive, negative and neutral. Sentiment analysis will be undertaken for all comments collected first per course and then by question. The sentiment analysis by NELI course 1, 2 and 3 will allow us to track sentiments as learners progress through the training.

In order to undertake the sentiment analysis, we will first compute sentiment scores with *analyzeSentiment* and we will convert the scores to tertiary sentiment classes (negative, neutral or positive) with the *convertToDirection* command. The scores can take positive or negative values and classify if the words have positive and negative polarity based on existing language library<sup>15</sup>. We will estimate sentiment scores by course type and by question. We will display sentiment scores by NELI course graphically using the *plotSentiment* command.

Prior to the text mining analysis an important step is data cleaning as we want to remove words that do not have any meaning for our analysis. Data cleaning would include lowercasing the text, removing punctuation and numbers, removing excess

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<sup>15</sup> For more information see Feinerer, I. & Hornik, K. (2018). tm: Text Mining Package (R package version 0.7-6). Retrieved from <https://cran.rproject.org/web/package=tm>.

whitespace, replacing abbreviations, replacing symbols, word stemming, adding stop words in the existing list based on other stop words , and removing certain words.