



Education
Endowment
Foundation

Evaluation of Infant Language Link, a two-armed cluster randomised control trial

Further appendices

October 2025

Martin Culliney, Ester Ehiyazaryan-White,
Dieuwerke Rutgers, Karen Daniels

**Sheffield
Hallam
University**
Knowledge Applied

Sheffield
Institute
of Education



The Education Endowment Foundation is an independent charity dedicated to breaking the link between family income and education achievement. We support schools, colleges and early years settings to improve teaching and learning for 2 – 19-year-olds through better use of evidence.

We do this by:

- **Summarising evidence.** Reviewing the best available evidence on teaching and learning and presenting in an accessible way.
- **Finding new evidence.** Funding independent evaluations of programmes and approaches that aim to raise the attainment of children and young people from socio-economically disadvantaged backgrounds. Putting evidence to use.
- **Putting evidence to use.** Supporting education practitioners, as well as policymakers and other organisations, to use evidence in ways that improve teaching and learning.

We were set-up in 2011 by the Sutton Trust partnership with Impetus with a founding £125m grant from the Department for Education. In 2022, we were reendowed with an additional £137m from government, allowing us to continue our work until at least 2032.

For more information about the EEF or this report please contact:

-  Education Endowment Foundation
5th Floor, Millbank Tower
21–24 Millbank
SW1P 4QP
-  0207 802 1653
-  info@eefoundation.org.uk
-  www.educationendowmentfoundation.org.uk

Table of Contents

Appendix D: Recruitment documents.....	4
Appendix E: Sample analysis code.....	11
Appendix F: IPE interview and observation schedules.....	12
Appendix G: Baseline histograms.....	30
Appendix H: School staff questionnaires.....	35
Appendix I: Creating a combined language variable.....	43
Appendix J: School staff survey results from IPE RQ2.....	46

Appendix D: Recruitment documents



Memorandum of Understanding: Infant Language Link trial

Thank you for agreeing to participate in the Infant Language Link efficacy trial, delivered by Speech Link Multimedia Limited, funded by the Education Endowment Foundation (EEF) and evaluated by Sheffield Hallam University (SHU). This document sets out the commitments of these three parties and your school. Please read this document and provide a signature at the end.

School Name: _____

School Postcode: _____

1. **Aims of the trial**

Infant Language Link is an online package that enables schools to identify and support children who have mild to moderate language needs, using a standardised screening assessment and tiered levels of intervention support. This trial aims to evaluate the impact of Infant Language Link on the language skills of Y1 pupils, to examine the effect on different groups of pupils and to understand the experiences of teachers and teaching assistants involved in the project.

The children that are identified and require support are re-screened to track and monitor progress. Teachers and TAs receive online training and conduct one-to-one language screening with each pupil in their class at the start of the programme. The screening prompts are delivered verbally, and responses are entered into the Language Link website. The screening takes on average 15-20 minutes per child, and identifies children with language needs that require universal and targeted support.

This EEF project is part of a wider DfE funded programme called the 'Accelerator Fund' which aims to increase access to evidence-informed programmes. School staff taking part in the project may be contacted with a request to participate in further research into their experience of taking part in an Accelerator Fund project.

2. **Evaluation design**

The research design is a randomised controlled trial and will recruit 150 primary schools across England to participate in the one-year study. Schools who agree to take part in the trial will be randomly assigned by SHU into one of two groups:

- 1) **The 'intervention' group**, who receive the Infant Language Link programme for one year.
- 2) **The 'control' group**, who will not receive the intervention, and will receive £500 for completing all testing and data requirements as specified in this document.

There will be an equal number of schools between the two groups, with half of schools being randomly assigned to the 'intervention group' and the other half to the 'control group'. Random assignment of schools is essential to the evaluation as it allows us to test the impact of the programme rigorously. It is important that schools understand and consent to random allocation.

Schools will be notified of which group they have been allocated shortly after half term in October 2023 provided that all other requirements set out in this document have been fulfilled.

All schools must agree to take part in the following evaluation activities:

E. Completing a baseline teacher survey (Summer 2023)

Year 1 teachers will take part in a short online survey about usual practice in school with regard to language teaching and their own experience and confidence. Schools will be asked to circulate a link to the survey before being informed of allocation to the intervention or control group.

F. Sharing project information with parents (Summer 2023)

Schools will inform parents and students about data processing using a template letter provided by SHU. Parents will be given two weeks to withdraw their child from the study.

G. Sharing pupil data with SHU (Summer 2023)

Once parents and students have been informed about the research and data processing, schools will be asked to share the Unique Pupil Number (UPN), date of birth, and full name for each eligible Y1 pupil¹ (unless they have been withdrawn by their parent /carer) with SHU via secure transfer.

H. Supporting administration of pupil assessments (Sept/Oct 2023 and June/July 2024)

Students will take part in a one-to-one language assessment administered by trained researchers at the beginning and end of the trial, each lasting up to 30 minutes. Schools will need to schedule the test with the evaluation team, book suitable rooms and ensure the selected students are able to take the test with a researcher who will visit the school. The test scores will be used to evaluate the impact of Infant Language Link on pupil language skills.

5. Participating in teacher interviews and observations (2023/24)

SHU will select a sample of schools and Year 1 teachers to be involved in research interviews and classroom observations. Participation will be voluntary. Names and personal details of teachers and students will not be included in any reporting.

6. Completing an end of trial teacher survey (June 2024)

Year 1 teachers will take part in a short online survey that is similar to the one conducted at baseline. Schools will be asked to circulate a link to the survey and request completion prior to testing.

By signing this MoU, schools are agreeing to follow the requirements for the group to which they are assigned. Additional responsibilities for schools randomly allocated to the intervention group are detailed below.

The evaluation is conducted by Sheffield Hallam University and will aim to:

- Compare pupil assessment results between intervention and control groups at the end of Year 1 (summer 2024), adjusting for each pupil's prior results, from Autumn 2023;
- Investigate how the impact of Infant Language Link differs by FSM and EAL status.
- Gather teachers' perspectives about how the programme changes their teaching practice and how it benefits pupils.

3. School eligibility criteria

1. Mainstream state primary schools in England with at least 20 Y1 pupils are eligible.
2. Schools must not have delivered the Infant Language Link programme in the past.

4. School Responsibilities

All schools participating in the trial (whether assigned to the intervention or control group) are expected to:

- **Comply with the requirements of the intervention or control group** as randomly allocated by the evaluation team.
- **Have named key contacts to support the evaluation activities:** these contacts have already been provided by schools as part of the trial application form. These members of staff will be the main point of contact for the Sheffield Hallam University research team and will provide support to schedule and carry out evaluation activities.
- **Distribute data processing information letters to parents and students:** inform parents and students about the school's participation in the trial and how student data will be processed and offer them the opportunity to withdraw from the study within two weeks.

¹ The evaluation will **not** include children with diagnosed autistic spectrum disorders (ASD), selective mutism or global learning difficulties

- **Commit to taking part in all stages of the evaluation:** as specified in the list above. This will require the named contacts at the school to provide pupil data to the evaluation team in Summer 2023, coordinate the completion of teacher surveys and pupil assessments conducted by the evaluation team, help organise teacher interviews and observations for the evaluation, and, for schools in the treatment group, implement the programme.
- **Be responsive:** respond to requests from Sheffield Hallam University for information and complete the evaluation tasks, aiming to respond to emails within a week.

Intervention schools are also expected to:

1. Commit to participating in the trial during 2023/24.
2. Deliver the intervention as intended for Y1 in 2023-24, including:
 - a. Whole class intervention.
 - b. Targeted intervention.
3. Nominate a contact to lead the programme implementation in your school.
4. Release all Year 1 staff working in the identified class, plus the school SENCo, to attend the Infant Language Link training:
 - a. Webinar 1: An Introduction to the Language Link Whole School Approach (1.5 hours) – Attended by SENCo, Class Teacher and TA/LSA
 - b. Webinar 2A: Language Link in the Classroom (1 hour) – Attended by Class Teacher and SENCo
 - c. Webinar 2B: Delivering Language Link Interventions (1 hour) – Attended by TA/LSA and SENCo
5. Allow staff to fulfil the Infant Language Link intervention requirements.
 - a. Year 1 teachers require planning and preparation time to embed four core quality teaching strategies across all their teaching
 - b. TAs require planning time to prepare resources to deliver targeted intervention

5. Sheffield Hallam University responsibilities

- Provide at least two weeks' notice before any action needs to be completed by the school.
- Be a point of contact for questions specifically about the Infant Language Link evaluation.
- Collect and analyse data from schools and the National Pupil Database (to obtain data on pupil FSM and EAL status) to evaluate Infant Language Link, processing personal and special category data as set out below and in the privacy notice.

6. Responsibilities of the delivery team (Speech Link Multimedia Limited)

- Give intervention schools access to the intervention resources and deliver the training and support.
- Provide support to schools participating in the programme. This will involve handling all queries submitted by schools about using the Infant Language Link package and responding to schools in a timely way.
- Pay control schools £500 at the end of 2023-24 once all evaluation activities have been completed, including submission of pupil data and completion of baseline and follow up pupil assessments.

7. Use of personal data and GDPR

- SHU and SLM are independent data controllers as both are collecting data from schools. All data will be held on secure organisational networks. The processing of personal data is defined under GDPR (Article 6 (1e)) as a task in the public interest. Special category data will be processed for the purpose of research under GDPR Article 9 (j). Full details can be found in the privacy notice.
- The pupil assessments will be administered by SHU. Results will only be accessible to the SHU team working on this trial, and researchers subsequently authorised to securely access the data through the EEF Data Archive.
- After the evaluation is complete, SHU will retain participant data in anonymised form for research and knowledge exchange purposes, including academic presentations or publications, for five years after the publication of the final project report. SHU will remain as a data controller for this period.
- SHU will also submit project data to the EEF data archive once the final report has been published. At this point, EEF becomes a data controller, and EEF's data contractor for the archive becomes a data processor.
- Evaluation data will be linked with information about the students from the National Pupil Database (NPD), and shared with the Department for Education, the EEF's archive manager and, in an anonymised form, with the Office for National Statistics, the UK Data Archive and potentially other authorised research teams. Further

matching to NPD and other administrative data may take place during subsequent research. Personal data will not be transferred or stored outside of the EEA at any point.

- The details of the member of staff signing the MOU (name and work email) will be shared with the EEF. Please see [EEF's privacy notice](#) for more information on how EEF processes and uses your data.

8. Agreement to participate in the Infant Language Link trial

We commit to taking part in the Infant Language Link trial as a member of either the intervention or control group as determined by random allocation and will comply with the requirements set out in this document.

We commit to providing pupil data to the evaluation team in Summer 2023 to enable the evaluation team to obtain data on the characteristics of participating pupils for evaluation purposes.

We commit to allowing pupil assessments to take place in September/October 2023 and to supporting the outcome assessment to take place in school during June/July 2024.

Headteacher

Name:

E-signature: _____ Date: _____

Parent information sheet

Evaluation of Infant Language Link

Dear parent/carer,

Your child's school is participating in a study evaluating the Infant Language Link programme, delivered by Speech Link Multimedia Limited, funded by the Education Endowment Foundation (EEF) and evaluated by Sheffield Hallam University (SHU). This project will focus on pupils in Y1 during the 2023-24 school year.

About Infant Language Link

Infant Language Link is a package that enables schools to identify and support children who have mild to moderate language needs. Teachers/TAs receive online training on how to support pupils with language development. Initial language ability screening is conducted at the start of the programme with all pupils. This takes 15-20 minutes per child. Results are used to help teachers determine whether a child needs additional support with language.

All pupils in schools using Infant Language Link are taught by their usual teachers, who receive specialist training from the delivery team. Pupils identified for further support also do small group activities with Teaching Assistants to improve their language abilities.

About the evaluation

As part of this evaluation, half of the schools participating in the study will be randomly selected to use the Infant Language Link intervention in 2023-24. The other half (called the control group) will continue with 'business as usual', teaching their pupils as they normally would. This is so that the progress of pupils receiving the programme can be compared to those who are not. It is expected that the evaluation report will be published in early 2025.

To understand how well Infant Language Link improves pupil language development, SHU will need to collect certain data from schools. Specifically, schools will share pupil details (Unique Pupil Number, date of birth, full name) for one class in the 2023/24 Y1 cohort with SHU via secure transfer in June/July 2023. This data is needed to know which pupils are taking part in the project. SHU will also receive data from Speech Link Multimedia Ltd about pupils in intervention schools and how they progress during the study period.

All participating pupils in all schools (intervention and control) will take a language assessment in September/October 2023 and again in June/July 2024. Specifically, this will comprise the Pearson Clinical Evaluation of Language Fundamentals and the Renfrew Action Picture Test, which focus on expressive and receptive language (speaking and understanding) and take no more than 30 minutes per pupil. These assessments are separate from the initial language screening conducted as part of the Infant Language Link intervention. A member of school staff will be present and will explain to the pupil that they can stop immediately if they are uncomfortable in any way. Individual results will not be shared with the school or parents. Parents who do not want their child to take part can withdraw them from the evaluation by returning the slip at the end of this letter to their school.

Data on pupil characteristics (Free School Meals and English as an Additional Language status) and prior attainment will also be obtained from National Pupil Database to help us understand how well Infant Language Link works for these pupils. For further details please see the project privacy notice: https://www.shu.ac.uk/-/media/home/research/sioe-rke/privacy-notices/ill_privacy_notice-v3.docx

Data protection

All personal data will be kept confidential and processed in accordance with the General Data Protection Regulation (Article 6 (1e) and Article 9 (j)). SHU will write a report at the end of the evaluation, to be published by EEF. No individual pupils, teachers or schools will be mentioned in the report. All data will be stored securely on SHU and Speech Link's systems.

Please see the SHU Privacy Notice for details about how your child's data will be treated: <https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notice-for-research>

This EEF project is part of a wider DfE funded programme called the 'Accelerator Fund' which aims to increase access to evidence-informed programmes. At the end of the project, data will be submitted to the EEF Data Archive. At this point, EEF and DfE will be data controllers and contractors appointed to manage the Data Archive will be data processors. The evaluation data will also be linked with information about the students from the National Pupil Database (NPD), Department for Education, the EEF's archive manager and, in an anonymised form, with the Office for National Statistics, the UK Data Archive, and potentially other approved researchers. Speech Link will conduct their own analysis of the trial data once the evaluation is completed and will use an external processor for this purpose.

If you would like more information about this project, you can contact the research team at SHU using the email address below or visit the websites for EEF or Infant Language Link.

SHU Email: LanguageLink@shu.ac.uk

EEF Website: <https://educationendowmentfoundation.org.uk/>

If you do not want your child's school to share your child's data with SHU for the purpose of this evaluation, please complete the slip at the bottom of the page and return it to the school within two weeks. Please note that if you wish to opt your child out of the evaluation, they can still take part in the Infant Language Link lessons, but not the evaluation.

If you are happy with everything in this letter you do not need to do anything.

Dr Martin Culliney

Senior Research Fellow

Sheffield Hallam University

Infant Language Link Evaluation OPT-OUT SLIP

I do **not** want my child to take part in the evaluation of the Infant Language Link programme, including all the research activities described above:

Your child's name.....

Your full name.....

Your signature.....

Date.....

School recruitment screening survey

1. Name of school:
2. School URN:
3. Address:
4. Postcode:
5. Total number of pupils moving into year 1 in September 2023
6. Number of classes in year 1
7. Does your school have mixed year groups within your classes? Yes/No
8. Does your school currently use any programme/training/intervention designed to develop pupils' speech, language and communication skills? Please tick all that are used in your school. Infant Language Link/ WellComm/ Talk Boost/ NELI/ Language for Learning/ Elklan Training/ other ["other" boxes when ticked, allow you to add information.
9. How long has your school used these packages for? Enter the name of the package followed by the years
10. How many hours of SLCN intervention is delivered in your school currently using these packages? None/Less than 1 hour per week/ 1 hour per week/2-3 hours per week/ More than 3 hours per week.
11. Which year groups are these interventions delivered to?
12. Has your school previously used any different speech and language intervention packages that you no longer use? Yes/No
13. If yes, please state the name of the intervention package and reasons for discontinuing the intervention.
14. Does your school receive any support from external Speech and Language Therapy Services? Yes/No
15. If Yes, please describe the service provided in terms of who delivers the service e.g. NHS or independent practitioner.
16. How often do you access these services? Daily/Once per week/Once every half term/Once a term/Once a year/Other
17. Would your school be interested in participating in the project for a second year (2024/25)? Yes/no
18. Contact name
19. Contact email address
20. Contact role within school
21. Contact telephone
22. Please state where you heard about this project? EEF website/The Link magazine/From a colleague/Google search/Speech and Language Link website/other

Appendix E: Sample analysis code

Impact analysis

```
mixed Primary_outcome Allocation Pupil_centred_Baseline centred_school_mean_Baseline ///
```

```
EIA Use_int b.1EXT_SLT|| School_ID:
```

```
estat icc
```

Creating combined language outcome

```
foreach x of varlist Celf_LC Celf_SC RAPT_Grammar RAPT_Information {
```

```
    egen z_`x' = std(`x')
```

```
}
```

```
egen z_baseline = rowtotal(z_Celf_LC z_Celf_SC z_RAPT_Grammar z_RAPT_Information)
```

```
egen Z_baseline = std(z_baseline)
```

Appendix F: IPE interview and observation schedules

Interview schedule

Ethics statement:

We are gathering data to help us evaluate the Infant Language Link project. This interview forms part of the evaluation. Any data collected today will be kept securely and will remain confidential. Only members of the evaluation team will have access to the anonymised transcript. Use of the interview data for this evaluation or any research project or publication will ensure anonymity. You are welcome to withdraw this consent at any time during the interview and for up to six days afterwards. Are you happy to give your consent to use this interview for evaluation and publishing purposes?

Name of school:

Please state your name for the interview.

How long have you been teaching?

What is your current role in the school?

Have you had any training in supporting children with speech and language prior to this intervention?

How long have you been using ILL?

Have you settled into it, or do you feel you are still learning to use the programme?

What elements of the ILL programme have you been able to implement so far?

Use of standardised receptive language screen (RQ1, RQ3)

Did the webinar training provide enough information on how to complete the screening test?

Were all the children tested using the ILL receptive language screening test?

Were you able to complete the testing before the Christmas break?

Did you find the screening tool useful and if so in what ways?

Were you able to complete each child's screening in one sitting (without taking breaks)?

Were there any challenges with or barriers to carrying out the screening?

Did you use a desktop computer or ipads? Were there any issues with technology?

Prior to using ILL, did you have a way of identifying children needing additional support with speech and language?

How effective would you say these methods were as compared to using the ILL receptive language screen?

Did the screening help you identify children in need of speech and language support who you weren't aware of as needing support previously? Was this a surprise?

Would you say the screening tool is effective? Has it enabled you to identify children who need speech and language support earlier?

Use of ILL quality first teaching strategies across classroom teaching (RQ1, RQ5)

The four core strategies which ILL is based around are:

- break it down
- explain clearly
- check as you go
- keep it visual

Using the handout as a reminder, could you talk through how you used these strategies in the classroom and how they were received by the children. Could you give some examples of the use of these strategies.

Are the strategies used in every lesson?

Have your practices changed in any way around the use of these four core strategies?

ILL includes strategies for 'creating the right environment'; these include:

- Lots of turns on each task
- Teaching vs testing
- Think about vocabulary
- Break down instructions
- 10 second rule
- Check understanding
- Modelling, recasting and expanding

How did you find implementing these strategies – were there any challenges or any successes you'd like to share? Have your practices changed in any way around the use of these strategies?

Which of the '**good to go**' resources in the Spread the word activity pack did you use? (e.g. confidence indicators, good listening cards, help me cards, question box, question cue cards, visual timetables)

Which resources did you find particularly useful?

Were there any resources which did not work so well? Could you expand.

Did you use some of the '**take a break**' activities during break times, in the playground or in the lunch hall? Do you have any insights on how the children responded to these? Were there any of these resources which the children engaged with more?

Did you use the '**grounds and around**' posters and resources? Did you think these were helpful and in what ways?

Teacher rating of pupil engagement forms (RQ1)

Did you complete these for each child before the start of the intervention?

Overall, as a result of using the tracking measures and carryover activities embedded in ILL do you feel you have a better overview of the progress made by the children identified as having below average speech and language skills?

How does this compare with any tracking measures you used before starting the intervention?

Progress measures and carryover activities (RQ1; RQ5)

Did you have a way of monitoring progress for children with speech and language needs prior to the intervention?

Has using ILL progress measures and carryover activities helped with monitoring progress?

Did you have a way of passing on information about pupils with SLCN as they move up the school before using ILL?

Do you plan to use the ILL pupil data to pass on information as pupils move up the school?

Does the TA regularly share the tracking sheets from intervention groups with you?

Does the TA regularly share the teacher guidance notes after intervention groups with you?

Are targets set for improvement for each child?

Do you feel you have a good overview of how the children are progressing in intervention groups?

How do you act on the information in the tracking sheets – do you adapt teaching in the whole class sessions in response to this information?

Use of help desk (RQ1)

Have you contacted the ILL Help Desk since the start of the intervention?

At which stages of intervention did you contact the Help Desk? With what questions?

- Setting up your school and adding pupils
- Adding children to intervention groups
- Accessing reports and data
- Screening of children
- Implementing the whole class strategies
- Implementing the targeted intervention sessions
- Downloading resources
- Uploading the teacher engagement rating for each child
- Uploading the tracking sheet data for each child
- Using the core strategies
- Using the whole class materials

Teachers' change of practice. Teachers' understanding and skills around oral language development (RQ2)

Has there been a change in your use of speech and language with the children? Please give examples.

Did the screening results affect your approach to teaching? Please elaborate.

Do you feel you have learnt anything new about how to approach speaking and listening in the classroom from the webinars or from using the ILL materials? Please give examples.

Teacher confidence (RQ2)

Are there any areas of supporting children with speech and language in which your confidence has increased since starting to use the ILL programme?

Has your confidence in identifying children with below average speech and language skills increased since starting to use the programme?

Has the programme helped you differentiate between the speech and language needs of all children and those of children who need further support?

Has your confidence increased in using whole class strategies to support the development of children's oral language skills since starting the ILL programme?

Do you feel more confident in giving feedback to individual children on their oral language skills?

Teachers' changes in views and beliefs (RQ5)

In the ILL programme teaching strategies using oral language are used in every year 1 lesson. What are your thoughts on this? (is this valuable, or does it take away from other areas which need focus?)

What do you think about the tiered nature of the ILL programme – some children are taught in targeted classes and there is also the whole class component. Do you think children benefit from this approach? Are there any drawbacks from such an approach?

Teachers' perceptions of impact on pupils (RQ4)

Has there been any change in the proportion of children's talk since starting to use ILL? Can you give any examples?

Do you feel that children demonstrate improvement in:

- Taking an active part in classroom activities
- Organising and using their materials for tasks
- Listening during classroom tasks
- Collaborating with peers during lessons and play
- Ability to learn new words
- Ability to follow classroom instructions
- Ability to ask for help in class
- Being able to understand and answer questions

Are there any specific challenges or benefits for disadvantaged pupils?

Are there any specific challenges or benefits for EAL pupils?

EAL (RQ4)

How did you implement the intervention and use the materials with EAL children?

Did you differentiate/ modify the core ILL teaching strategies in response to EAL children's needs?

Enablers and barriers (RQ6)

What have been the key enablers and barriers to implementing the ILL programme?

Was there any previous practice which made it easier to implement the ILL approach in the school?

Did you feel supported by the leadership team in implementing the programme?

Did you feel supported by the project lead in implementing the programme?

Were there any other activities (planned test preparation, other concurrent interventions) which impacted on delivering ILL?

Has ILL helped reduce the need for external support from SLT?

Finally, were there any unintended consequences of using the ILL programme? (RQ7)

Observation schedule (whole class)

Time & Date	School	L.O.s	
Subject / curriculum area	Topic / theme	L.O.s	
Description of classroom		Layout	
People in room (staff and number of children)			
Number of EAL children in the class			
Number of blue children in the class			
Number of red children in the class			
Area of investigation	Evidence		
Use of core strategies: explain clearly Examples could be: introducing new vocabulary; recapping any difficult vocabulary; making explicit links to context; using children's own experiences (e.g. at home); omitting new words from instructions; avoiding the use of negatives			
Use of core strategies: break it down Examples could be: teacher breaks task down into single steps; use of 'describe what happened' talk template; first, then, last cards; now and later cards; use of good listening cards to break down listening into its components			
Use of core strategies: check as you go Examples could be: teacher checks children's understanding; children using the 'help me' cards; children using the confidence indicator cards; use of the question box			
Use of core strategies: keep it visual Examples could be: use of photos or objects; use of visual timetables, displayed in the classroom, or on children's desks; use of mind maps, graphic organisers, story boards.			
Use of extension activities in the classroom Examples could be: Climbing word wall, Puddle points game, scavenger hunt, Story strings, good listening cards and tokens given, Hide the teddy game, finding big and small objects around the classroom, using classroom instructions which contain the target concepts, encouraging children to use *ing structures, encouraging children to use plurals, using the breakfast survey sheets, identify pronouns (he, she) during reading times.			
Evidence of children practicing oral language skills			

Evidence of children's responsiveness to the strategies used by the teacher	
Direct feedback given to children by the teacher or TA in class	
Reflexive comments	

Momentary time sampling (Classen and Cheetham, 2014)

<p>Focus the observation on one group of children (1 table), randomly chosen. Approx. 15 minutes into the start of the lesson, observe for a duration of 5 minutes, at 1 minute intervals; record + or – at the end of each minute. Avoid starting the observation if the teacher is giving instructions. Indicate:</p> <p>+ If any child in the group is speaking on task (responding to teacher question; discussing task with another child; discussing task with TA)</p> <p>- If no child talk is taking place</p>				
1	2	3	4	5
<p>Focus the observation on the same group of children (1 table), chosen at the beginning of the lesson. Approx. 30 minutes into the start of the lesson, observe for a duration of 5 minutes, at 1 minute intervals; record + or – at the end of each minute. Avoid starting the observation while the teacher is giving instructions. Indicate:</p> <p>+ If any child in the classroom is speaking on task (responding to teacher question; discussing task with another child; discussing task with TA)</p> <p>- If no child talk is taking place</p>				
1	2	3	4	5

Covered – instructor shows practical examples, short videos; elaborates on concepts; provides full explanation of concepts

Mentioned – this area is mentioned but no practical examples provided.

Not discussed – no mention of this area in the webinar

Time & Date					
Session title (delete as appropriate)			Webinar 1 - Introduction to the Language Link Whole School Approach (Attended by SENCo/HT, Year 1 CT and TA) Webinar 2a - Using Language Link in the Classroom (Attended by SENCo/HT and Year 1 CT) Webinar 2b - Delivering Language Link Interventions (Attended by SENCo/HT and TA)	Number attending	
Content relating to whole school approach					
Covered	Mentioned	Not discussed			
Content relating to whole class delivery					
Covered	Mentioned	Not discussed			
Content relating to targeted group intervention sessions					
Covered	Mentioned	Not discussed			
SENCO responsibilities during the intervention					
Covered	Mentioned	Not discussed			
Class teacher responsibilities during the intervention					

Covered	Mentioned	Not discussed	
TA responsibilities during the intervention			
Covered	Mentioned	Not discussed	
Discussion of monitoring and evaluation of pupils' progress while on the programme			
Covered	Mentioned	Not discussed	
Discussion of audit and action plan for SLCN support			
Covered	Mentioned	Not discussed	
Discussion of teacher rating of pupil engagement progress measure			
Covered	Mentioned	Not discussed	
Discussion of quality first teaching strategies (break it down, explain clearly, keep it visual, check as you go).			
Covered	Mentioned	Not discussed	
Discussion of use of classroom resources to support these strategies			
Covered	Mentioned	Not discussed	

Discussion of children's access to classroom resources			
Covered	Mentioned	Not discussed	
Discussion relating to administering the ILL receptive language screening test			
Covered	Mentioned	Not discussed	
Discussion of carryover activities from intervention to whole class teaching			
Covered	Mentioned	Not discussed	
Discussion of access to support from Help Desk to solve technical problems and access advice from speech and language therapists re delivery.			
Covered	Mentioned	Not discussed	
Questions asked by participants through zoom chat			
Advice given on working with EAL children on SLCN			

Covered	Mentioned	Not discussed	
Other differentiation advice			
Covered	Mentioned	Not discussed	
Appropriateness for target audience Accessible to non-specialists			
Notes			

INFANT LANGUAGE LINK EVALUATION - PARTICIPANT INFORMATION SHEET

1. **Title of Project: Evaluation of Infant Language Link**
2. **Opening statement:** Your school is taking part in a study of the Infant Language Link (henceforth ILL) intervention this year. The evaluation team at Sheffield Hallam University would like to visit the school to gather information on how the intervention is going at your school.
3. **Legal basis for research for studies**

The University undertakes research as part of its function for the community under its legal status. Data protection laws allow us to use personal data for research with appropriate safeguards in place under the legal basis of **tasks that are in the public interest**. A full statement of your rights can be found at: www.shu.ac.uk/about-this-website/privacy-policy/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately, and their rights respected. This study was approved by the University's Research Ethics Committee with reference number ER51329820. Further information about research ethics can be found at: www.shu.ac.uk/research/excellence/ethics-and-integrity
4. **What will I be required to do?** A researcher from the evaluation team at Sheffield Hallam University would like to visit the school at a mutually convenient date. We would like to observe one whole class session, focussing on how ILL is used in the classroom. We would also like to observe one of the small group ILL targeted intervention sessions. You will not be required to do anything different from your usual classroom activities to accommodate this. We would also like to interview:
 - a. the year 1 class teacher who is using ILL in the classroom;
 - b. the TA who is delivering the small group targeted intervention ILL sessions
 - c. the SENCO or person with overall responsibility for the programme.

The interviews will last no more than 30 mins.
5. **Do I have to take part?** It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question should you wish.
6. **Are there any possible risks or disadvantages in taking part?** There are no risks or disadvantages to taking part in the school visits. All data we collect will be anonymised and no individuals or schools will be identifiable in the report or anything else we publish.
7. **What are the possible benefits of taking part?** By taking part you will be helping us to evaluate the programme and to understand what has been useful or challenging in using the ILL approach and materials. This can then be helpful for the developer of ILL in improving the programme or understanding better how it works in practice.
8. **When will I have the opportunity to discuss my participation?** You will have the opportunity to discuss your participation at the beginning of the school visit – before your interview with the researcher, or before the observations take place. You will also be given an opportunity to discuss your participation after an interview or observation. You have the right to withdraw from participation up to two weeks after the school visit has taken place.

9. **Will anyone be able to connect me with what is recorded and reported?** Your contribution to the study will be completely anonymous and your data will be kept confidential. No schools or individuals will be named in the write up of the data or in any publications. Details that would allow individuals to be identified will not be published, or made available, to anybody not involved in the research unless explicit consent is given by the individuals concerned, or such information is already in the public domain. A system of numbering will be used to anonymise the interview transcripts and participants' names. The audio files containing the interview data will be transcribed and anonymised for storage. The Sheffield Hallam University Guidance on Storage of qualitative data will be followed and the guidance on transcription from the UK Data Archive (2011) will be applied. Further information about the use of personal data from this study can be found in our privacy notice: https://www.shu.ac.uk/-/media/home/research/sioe-rke/privacy-notices/ill_privacy_notice-v3.docx
10. **How will you use what you find out?** The findings of the evaluation will be used to produce an anonymised evaluation report which will be published on the Education Endowment Foundation website. The findings will also be shared and discussed with Language Link – the developers of the ILL programme. Beyond this, the anonymised findings from the evaluation may be used to write for publication in peer reviewed academic journals or presented at academic conferences.
11. **How long is the whole study likely to last?** The study is expected to be completed by January 2025 however the school visit from the evaluation team will be completed in one school day.
12. **How can I find out about the results of the study?** Please feel free to ask any further questions or ask for clarification on anything concerning the project or your participation. Our contact details can be found below.

Researcher/ Research Team Details:

Dr Martin Culliney (Principal investigator) M.Culliney@shu.ac.uk 0114 225 6072

Dr Ester Ehiyazaryan-White (Co-investigator) E.Ehiyazaryan-White@shu.ac.uk 0114 225 6688

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

Email: DPO@shu.ac.uk

You should contact the Head of Research Ethics (Professor Mayur Ranchordas) if:

- you have concerns with how the research was undertaken or how you were treated

Email: ethicssupport@shu.ac.uk

Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555

Title of study: Evaluation of Infant Language Link

Please ensure that you have read the Participant information sheet before filling in this consent form.

Please give your full name: _____

Your school: _____

Are you a (please circle) Teacher Senior Leader Teaching Assistant

Please circle 'yes' or 'no' as appropriate

I have read the Participant Information Sheet for this study and understand that I may ask further questions at any point.	Yes	No
I understand that I am free to withdraw from the study without giving a reason. I can decide that I no longer want my data to be processed while my data is still identifiable (which may not be possible after 14 days). If I make this decision I should contact Martin Culliney, M.Culliney@shu.ac.uk or Ester Ehiyazaryan-White e.ehiyazaryan-white@shu.ac.uk	Yes	No
I agree to take part in the field visit, including observations of an Infant Language Link session and interviews, on the basis of the information provided to me in the participant information sheet.	Yes	No
I understand that I can stop the interview or observation at any point or choose not to answer any particular questions and this will not have any impact on my involvement in the Infant Language Link Programme.	Yes	No
I understand that although my comments and quotations from this interview may be included in reports, my name will not be used, and that Sheffield Hallam University will make every attempt to ensure the anonymity of myself and my school, ensuring that any sensitive information or comments are fully anonymised (with other information changed if necessary).	Yes	No

I understand that my personal details such as my name will not be shared outside this project.	Yes	No
I agree that the data in an anonymised form can be used for other research purposes (e.g. writing articles in journals)	Yes	No
I understand that anonymised data from this study may be retained by Sheffield Hallam University for up to 10 years after the study has finished. It may be available to other researchers (but only if it can be sufficiently anonymised to protect my identity).	Yes	No
I agree that my data can be used as set out in the privacy notice	Yes	No
I agree to this interview being recorded.	Yes	No
I understand that by choosing 'yes' to the above questions this is being taken as my written consent to taking part in this interview and/ or observation.	Yes	No

Thank you for taking the time to fill in this consent form.

Your signature _____

Date _____

Interviewer signature _____

Researcher's contact details:

Dr Ester Ehiyazaryan-White
Senior Lecturer in Childhood Studies
Department of Education Childhood and Inclusion
133 Charles Street, Sheffield City Centre
Sheffield S1 2ND
Sheffield Hallam University
Tel: 0114 225 6688

Please keep your copy of the consent form and the information sheet together.

Infant Language Link Evaluation - Privacy Notice Sheffield Hallam University and Speech Link Multimedia Ltd

Introduction

This document accompanies the Memorandum of Understanding signed by participating schools and outlines the responsibilities of Speech Link Multimedia Ltd (SLM) and Sheffield Hallam University (SHU) in handling personal data collected from participants as part of the Infant Language Link evaluation. Infant Language Link is being funded by the Education Endowment Foundation (EEF). Participants include: Teachers, Teaching Assistants, and pupils.

Personal data is information relating to an identifiable living individual. The UK GDPR and The Data Protection Act 2018 set out the rules that organisations must follow when processing personal data – for simplicity we'll refer to "UK GDPR" to cover both sets of laws.

Transparency is a key element of the UK GDPR and this Privacy Notice is designed to inform participants about:

- how and why SHU and SLM will use personal data collected in this evaluation
- what participants' rights are under UK GDPR, and
- how to contact us to exercise those rights

Participants' Rights

UK GDPR gives individuals a number of rights relating to the processing of their personal data:

- the right to be **informed**
- the right of **access**
- the right to **rectification**
- the right to **erase**
- the right to **restrict** processing
- the right to **data portability**
- the right to **object**
- rights in relation to **automated decision making and profiling**

Not all rights are available in all circumstances, for more information about these rights please see: <https://ico.org.uk/for-the-public/> and: <https://www.shu.ac.uk/about-this-website/privacy-policy/data-subject-rights/subject-access-request>

Participants can contact the participating school/SHU/SLM at any time to:

- withdraw from the Infant Language Link evaluation and have their individual data deleted
- request copies of their own personal data held by SHU/SLM (**a subject access request**)
- exercise **other rights** (e.g. to have inaccurate data rectified, to restrict or object to processing)
- **query** how data is used by SHU/SLM
- report a **data security breach** (e.g. if there are concerns that personal data has been lost or disclosed inappropriately)
- **complain** about how SHU/SLM have used personal data.

Details of who to contact are provided at the end of this statement.

Why are we processing participants' personal data?

It is necessary for SHU/SLM to process some personal data to evaluate the impact of Infant Language Link. This will help to strengthen the evidence about school-based language support programmes to inform future policy development.

Retention

After the evaluation with EEF is complete, SHU will retain participants' data for research and knowledge-exchange purposes, including presentations at professional or academic conferences, or publications in professional or academic journals, for five years after the publication of the final project report. SHU will remain as a data controller for this period. SHU will also submit project data to the EEF's contractor for their data archive, once the final report has been published. At this point, EEF becomes a data controller, and EEF's data contractor for the archive becomes a data processor. Data might also be shared in anonymised form with other researchers after this is archived.

SLM will not retain any personal data beyond the project unless directly requested to by the schools.

Respecting confidentiality

In the production of professional or academic publications or presentations, all data will be fully anonymised and no individual or school will be identified or identifiable. Should we wish to present or publish any information where a school may be identifiable, for example an exemplar case study of how a school has improved as a result of participation in the Infant Language Link evaluation, we will seek the school's consent for this, through the headteacher. Schools will be entirely free to refuse this and we would therefore ensure the school remained anonymous in this event.

What is the legal basis for processing activities?

The School and SHU are independent controllers for this project; SHU and SLM are also independent controllers for the processing of school contact data and SLM also act as the school's processor for the provision of the Infant Language Link package and the processing of pupil data.

The processing of personal data through the Infant Language Link evaluation is defined under GDPR as a specific task in the public interest. As data is being processed for the purpose of academic research by SHU, the main aim of which is to improve language ability among school pupils, the SHU's legal basis for processing your personal data is as a 'Public Task' (Article 6 (1) (e)). <https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/lawful-basis-for-processing/public-task/>

The primary lawful basis for the processing for SLM is that it is necessary for their legitimate interests (UK GDPR Article 6.1 (f)), those interests being the assessment of the efficacy of their product thus informing the commercial plans of the organisation. <https://gdpr-info.eu/art-6-gdpr/>

English as an Additional Language (EAL) and Free School Meals (FSM) status will be accessed from the National Pupil Database by SHU and processed for the purpose of scientific research. Unique Pupil Numbers (UPN) provided by the school to SHU will be used to access this data., which is not classified as Special Category Data under GDPR article 9 but will be treated as such as per DfE guidance (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/747620/Data_Protection_Toolkit_for_Schools_OpenBeta.pdf :p22)

Specifically, we are processing this data to determine if the Infant Language Link programme has different effects on different subgroups of pupils. EEF was established with a remit to break the link between family background and educational attainment, and all EEF projects conduct subgroup analysis on FSM pupils. We are also interested in the effect of the Infant Language Link programme for pupils who have EAL as we believe that it could be particularly beneficial to them.

Which Personal Data will we collect and use?

In order to provide our services we need to collect and use some personal data. Below is a list of what this will include for the trial:

Type of personal data	Pupil	Teacher	Teaching Assistant
Names	X	X	X
Contact details (work email address)		X	X
Personal identifiers: Unique Pupil Number, and date of birth	X		
Attitudinal survey responses		X	X
Attitudinal interview responses		X	X
Pupil progress data collected by SLM in intervention schools	X		
Baseline and outcome test data	X		
Data on participation in the Infant Language Link project and use of materials		X	X
Infant Language Link assessment and intervention outcome data	X		
FSM status, EAL status, and attainment data collected from the National Pupil Database	X		

Who will we share personal data with?

The privacy of personal data is paramount and will not be disclosed unless there is a justified purpose for doing so. Data may be shared between SHU/SLM and:

- **EEF** for the purposes of research and evaluation. This includes submitting project data to the archive managed by EEF’s data contractor at the end of the project. At this point, EEF becomes a data controller, and EEF’s data contractor becomes a data processor. Also the details of the participating school staff (name, work email) will be shared with EEF. See EEF’s **privacy notice** for more information on how EEF processes and uses your data.
- **Rainbow Transcriptions** will be engaged to transcribe of audio recordings of interviews and focus groups. SHU will ensure that appropriate contracts and/or data sharing agreements are in place and that personal data is processed in accordance with GDPR and other applicable legislation.
- **JBS Executive Education Ltd** will be used as a processor by SLM for undertaking analysis of the evaluation data. A data processing agreement will be in place and the dataset shared will be pseudonymised so that individual pupils and schools are not identifiable.

SHU and SLM NEVER sell personal data to third parties

Security

SHU and SLM take a robust approach to protecting the information they hold. This includes the installation and use of technical measures including encryption of data, firewalls and intrusion detection and prevention tools on networks and segregation of different types of device; the use of tools on University computers to detect and

remove malicious software and regular assessment of the technical security of SHU and SLM systems. SHU and SLM staff both monitor systems and respond to suspicious activity.

Alongside these technical measures, comprehensive and effective policies and processes are in place to ensure that SHU and SLM users and administrators of information are aware of their obligations and responsibilities for the data they have access to. Access to project data is restricted to the research teams and administrators associated with the project. Sharing of the data with other researchers would require approval by the SHU ethics committee who will ensure that all data protection requirements are met. Training is provided to new staff joining SHU and SLM. Existing staff have training and expert advice available if needed.

Data transfers from schools and between data controllers/processors will be conducted using a secure file transfer service and all files sent will be encrypted. Schools will receive full instructions on this. All personal data will be stored in locations that are only visible to specified members of the project team.

Further Information and Support

For further information about how SHU and SLM use personal data see:

<https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notice-for-research>

<https://www.shu.ac.uk/about-this-website/privacy-policy/information-governance-policy>

<https://speechandlanguage.support/auth/privacy-notice> for SLM acting as processor for the school in the context of the supply of Infant Language Link

The Information Commissioner is the regulator for GDPR. The Information Commissioner's Office (ICO) has a website with information and guidance for members of the public:

<https://ico.org.uk/for-the-public/>

If there are any concerns about the way this project processes personal data, please get in touch:

SHU		SLM	
Dr Martin Culliney (Principal Investigator)	M.Culliney@shu.ac.uk 10101 Arundel Building S1 1WB	Derry Patterson (Speech and Language Therapy Team Leader)	derry.patterson@speechlink.co.uk Speech Link Multimedia Ltd University Road Canterbury CT2 7FG 0333 577 0784
Data Protection Officer	dpo@shu.ac.uk 0121 225 3361	Data Protection Officer	dataprotection@speechlink.co.uk

If you have an ongoing concern, which is not addressed by getting in touch with the participating school, SHU or SLM, you can contact the Information Commissioner's Office, the body responsible for enforcing data protection legislation in the UK, at <https://ico.org.uk/concerns/>

Appendix G: Baseline histograms

Figure 1: CELF Linguistic Concepts at baseline

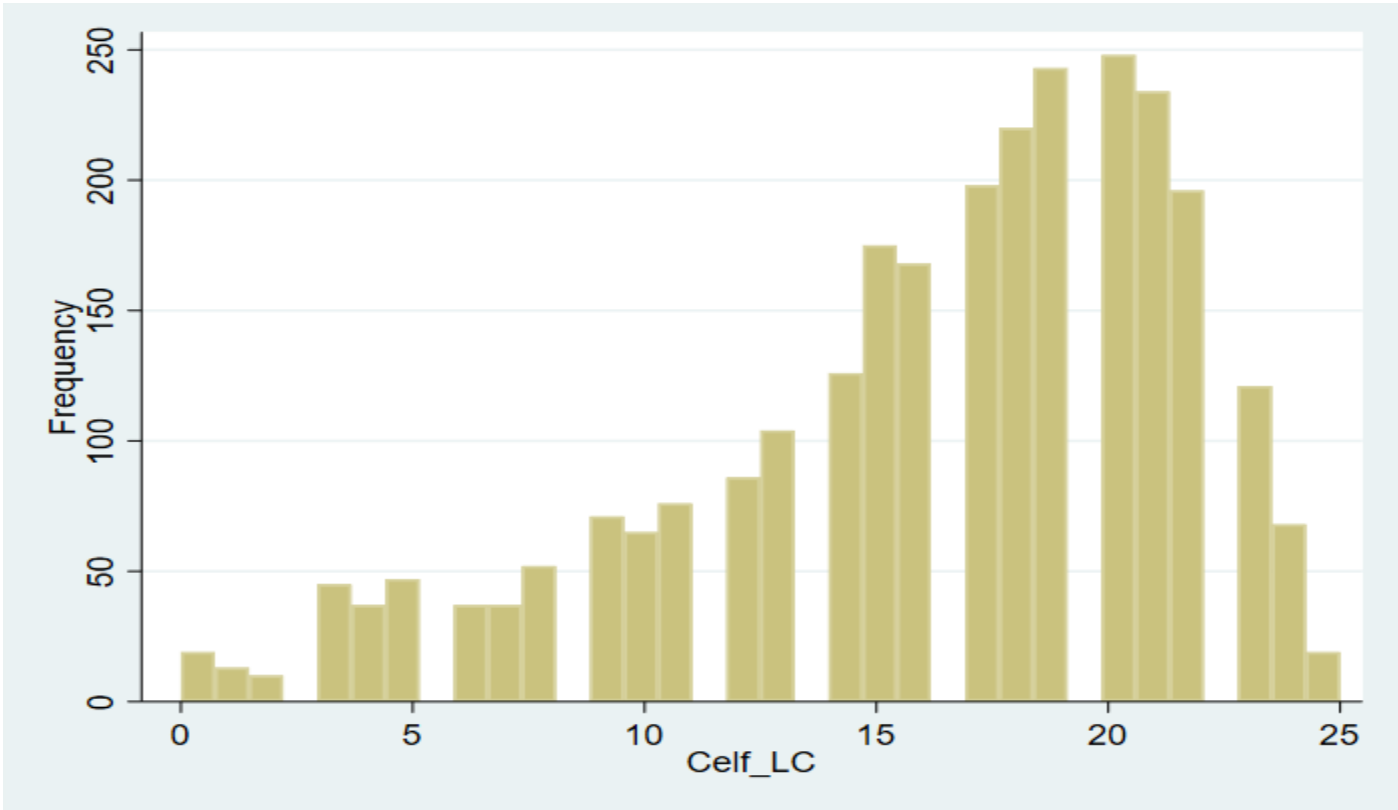


Figure 2: CELF Sentence Comprehension at baseline

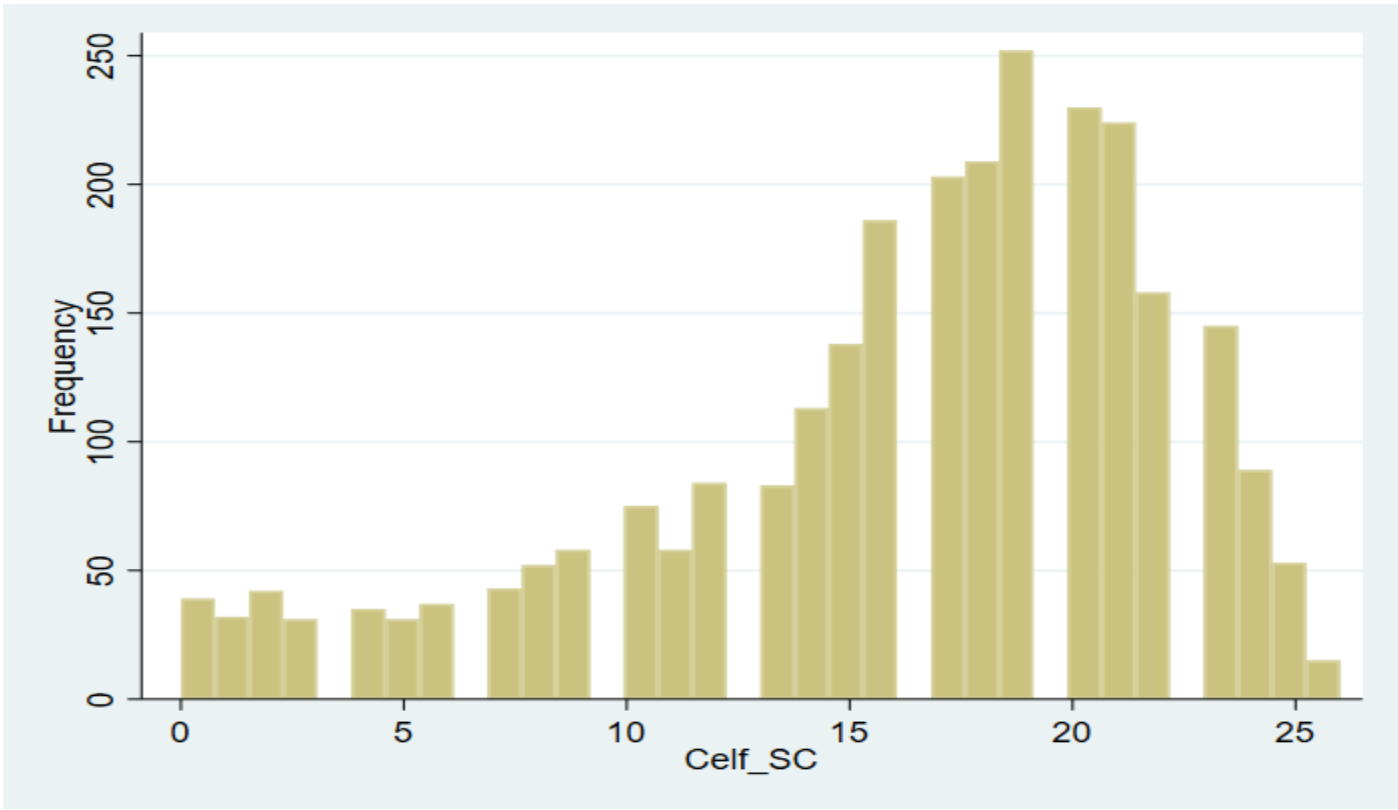


Figure 3: RAPT Grammar at baseline

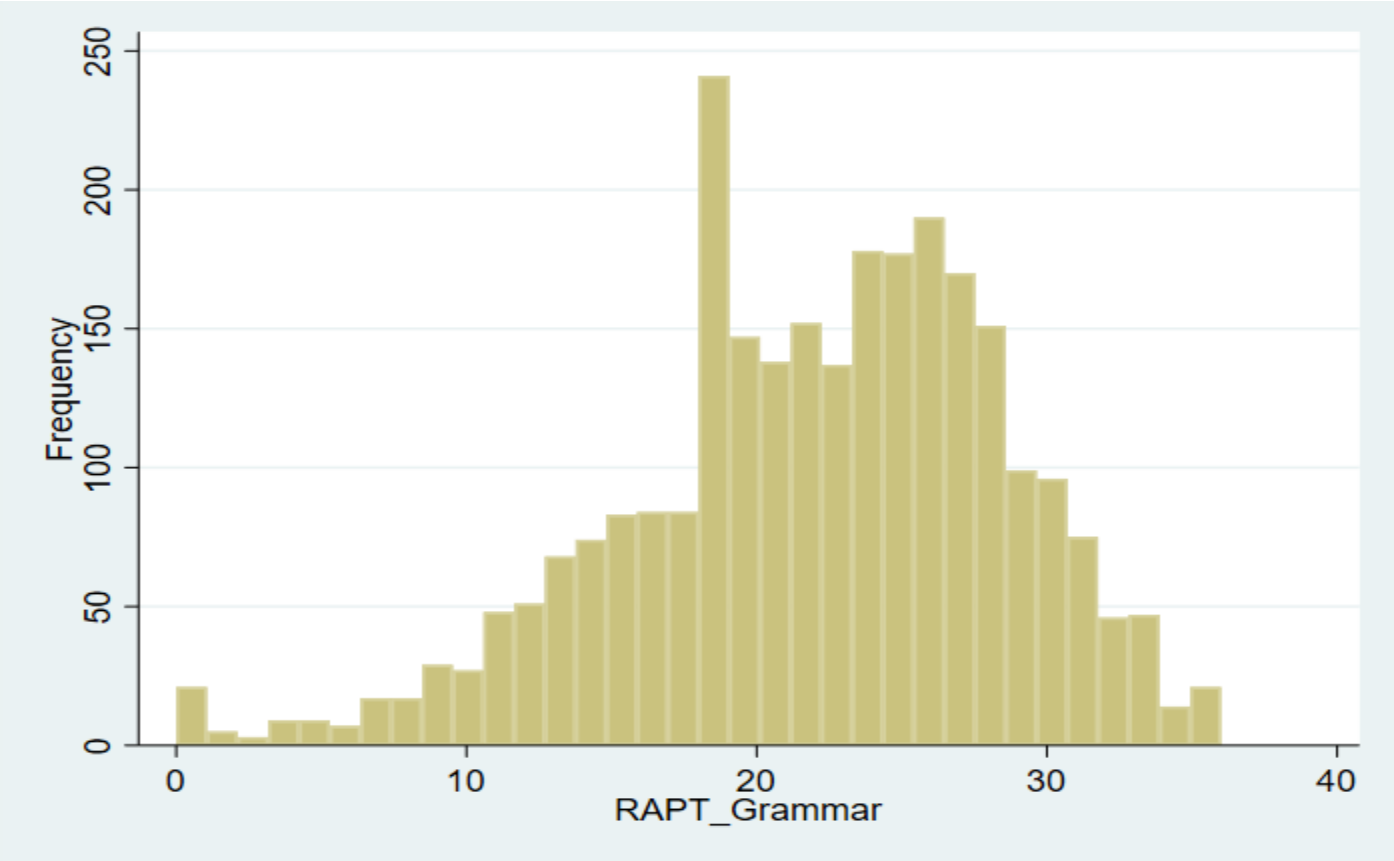


Figure 4: RAPT Information at baseline

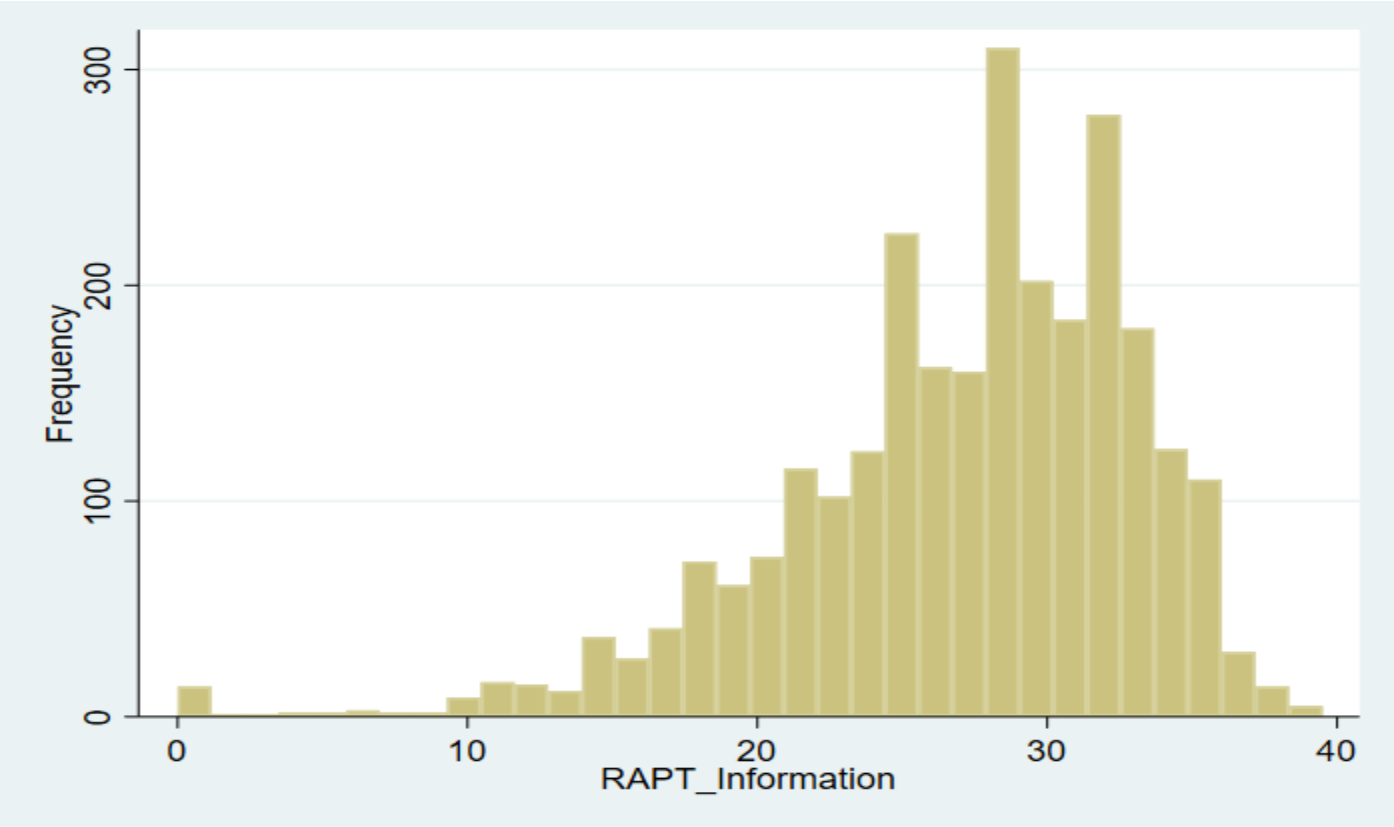


Figure 5: Combined language measure at baseline

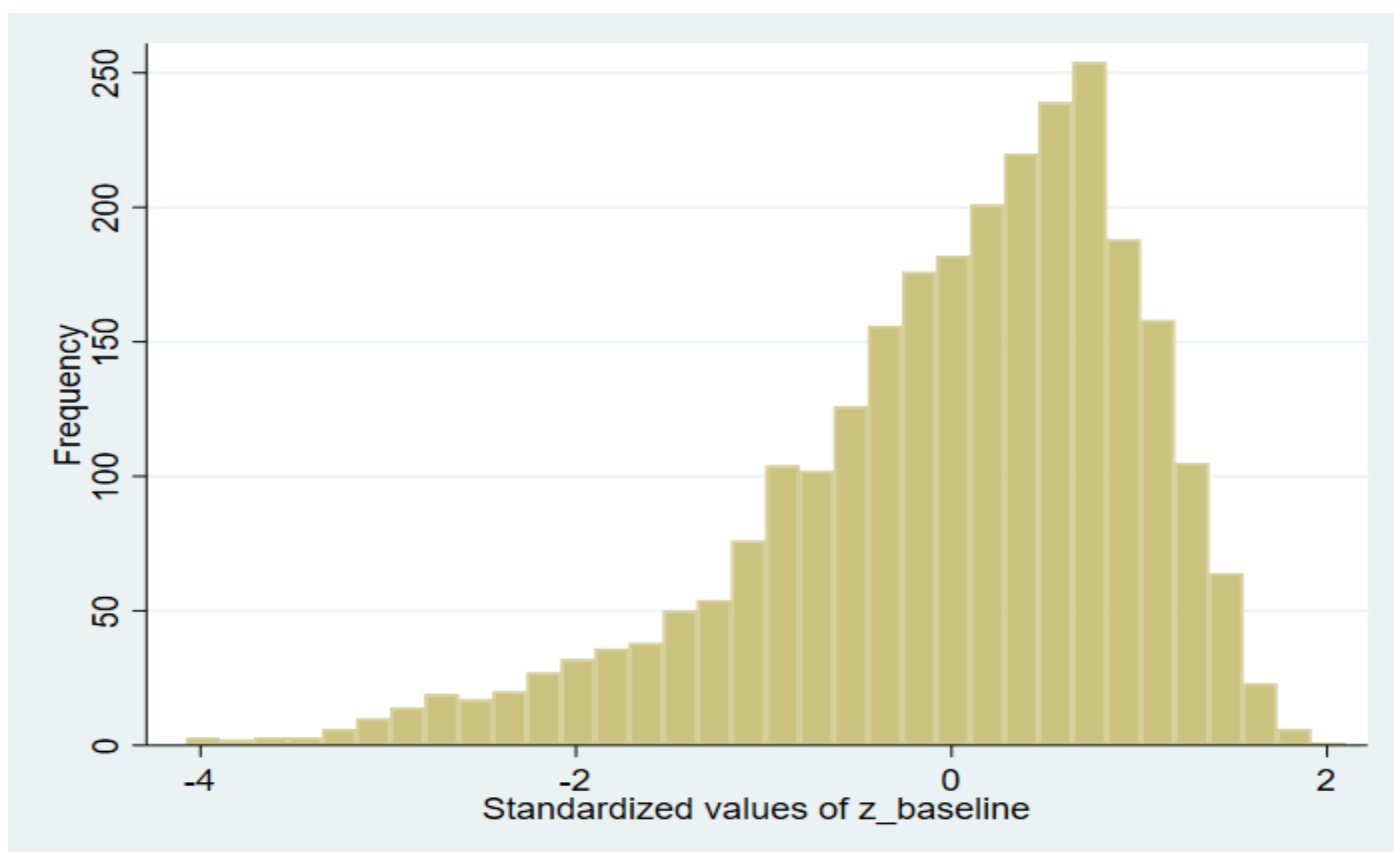


Figure 6: CELF Linguistic Concepts at outcome

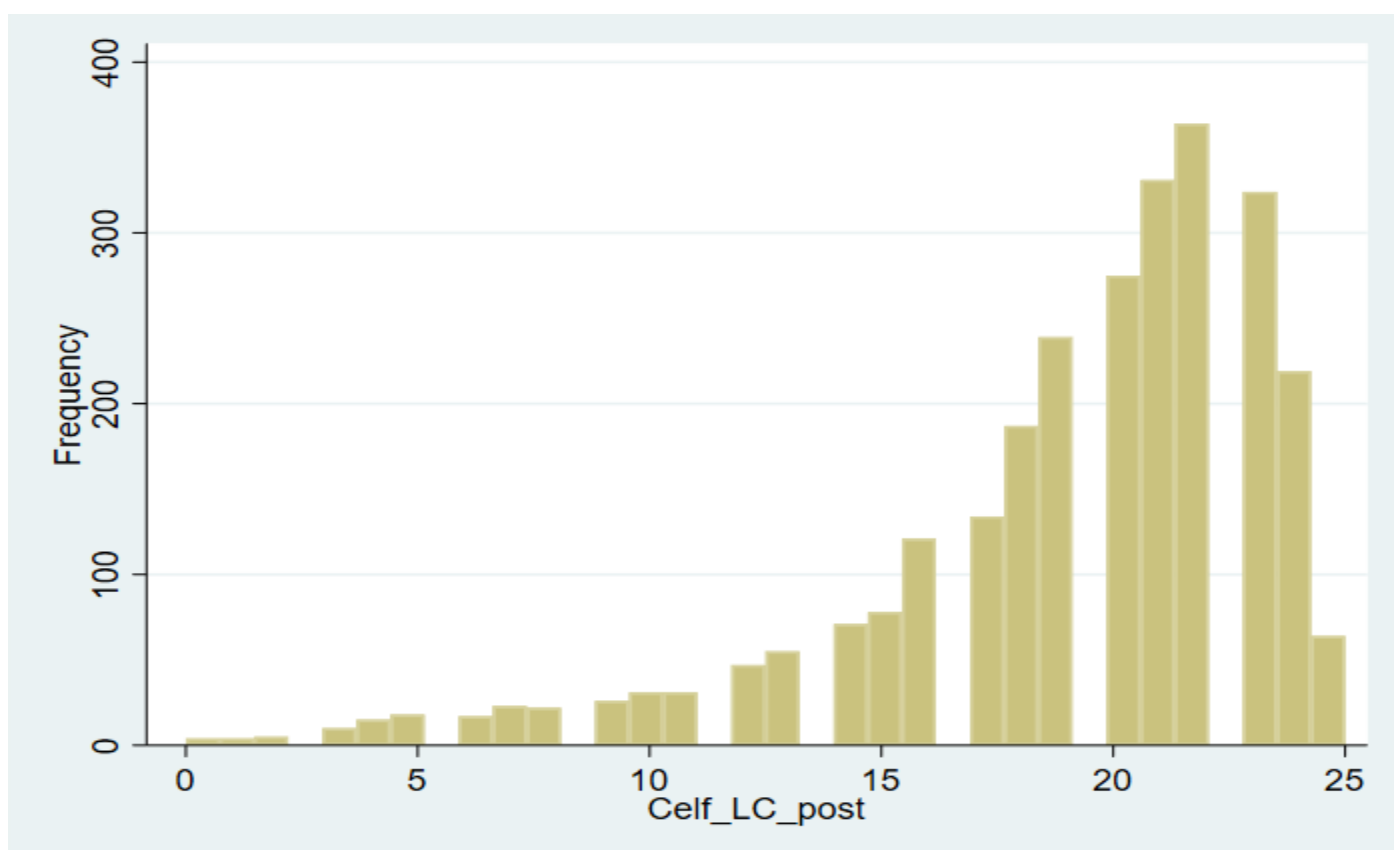


Figure 7: CELF Sentence Comprehension at outcome

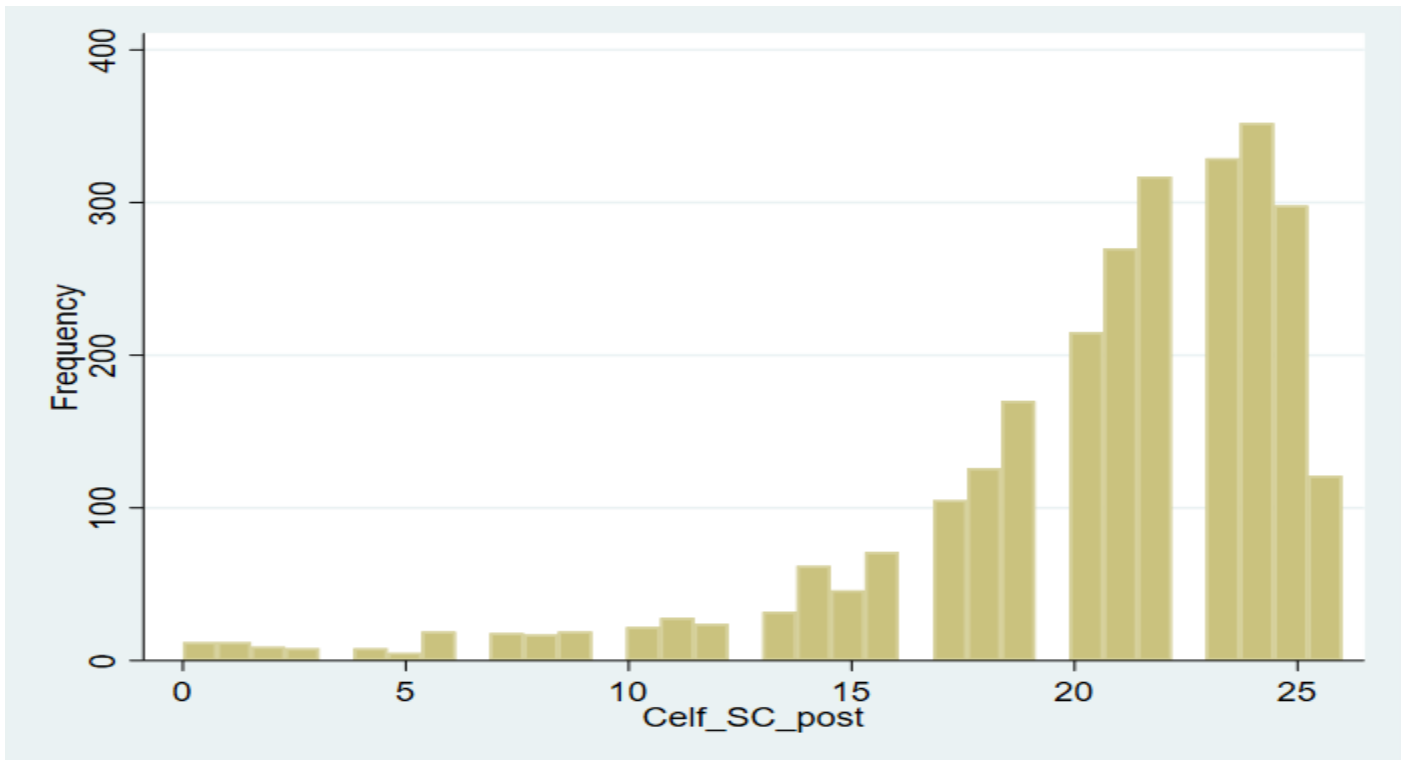


Figure 8: RAPT Grammar at outcome

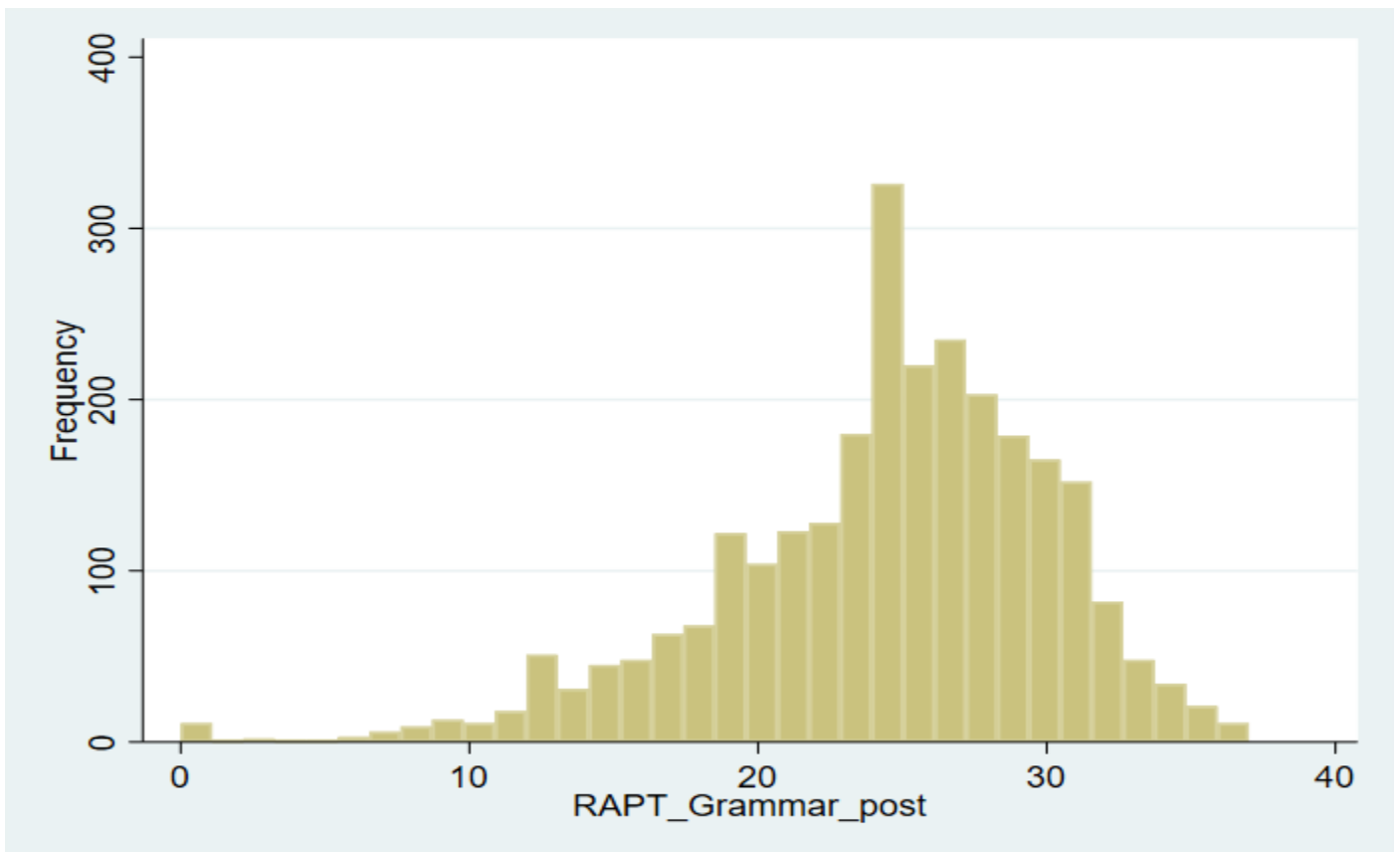


Figure 9: RAPT Information at outcome

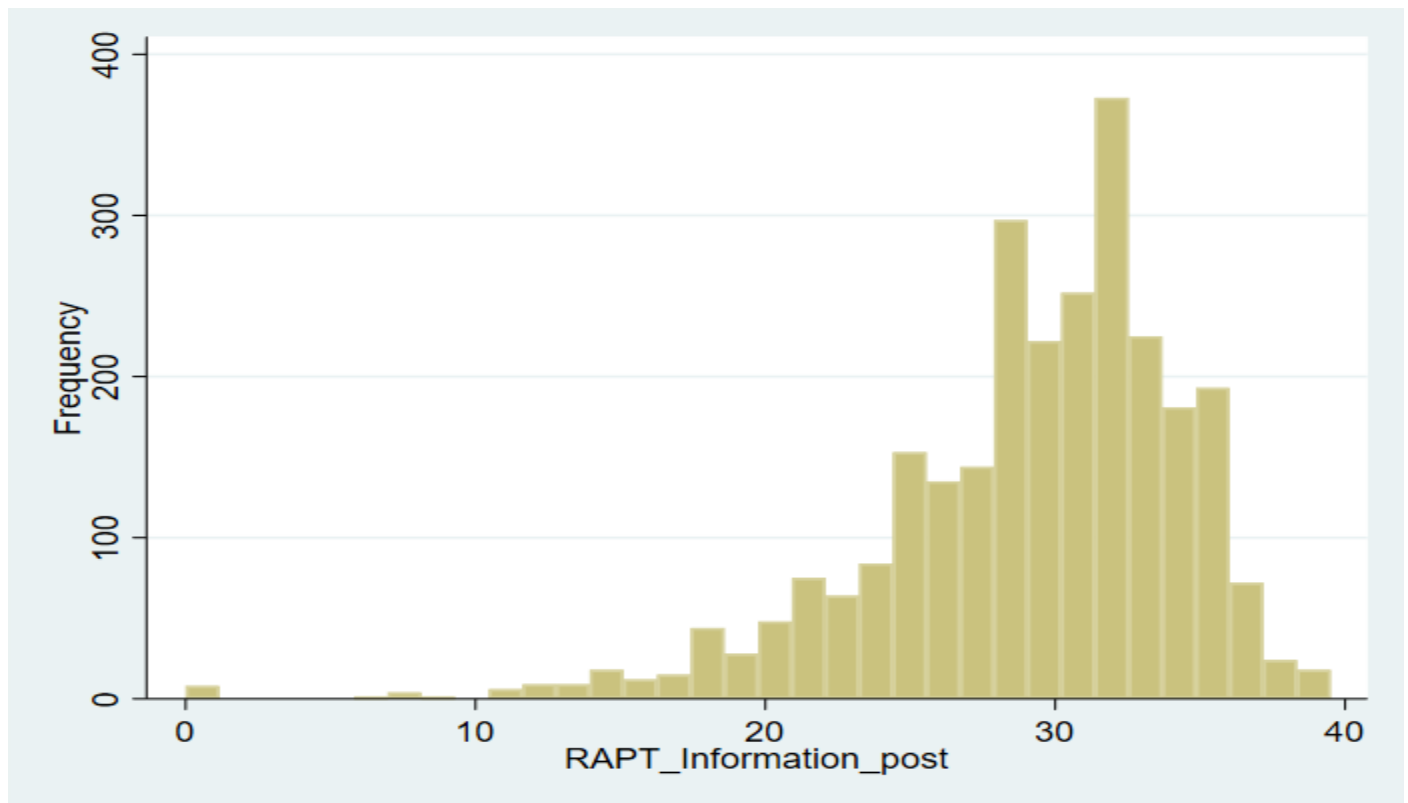
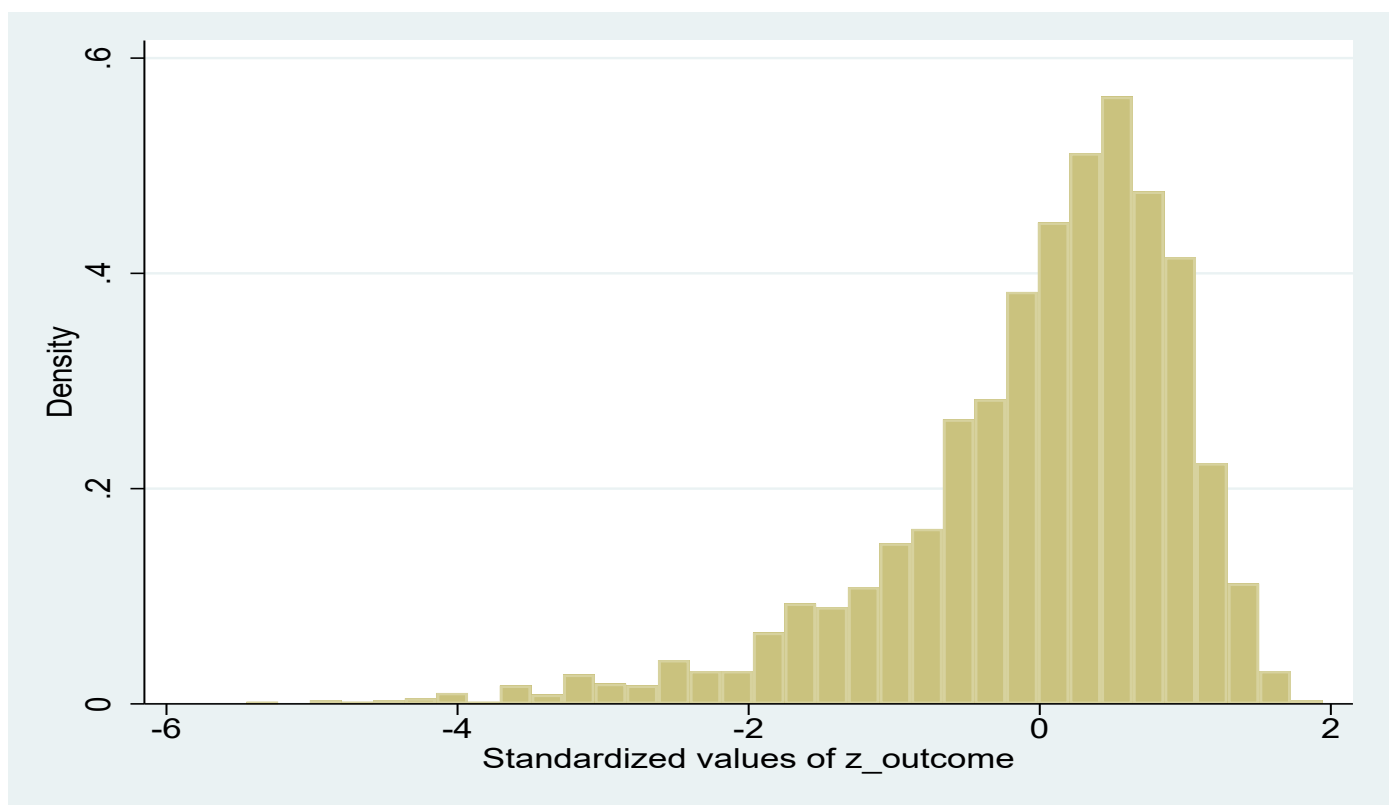


Figure 10: Combined language measure at outcome (primary outcome)



Appendix H: School staff questionnaires

Thank you for signing up for the Infant Language Link study. Whether your school is randomly allocated to the group that receives the intervention or the group that will continue teaching with a business as usual approach, you are making a valuable contribution to knowledge around pupil language development.

Your school has selected one Y1 class to take part in the study. This short survey is for completion by any school staff involved with that class as a teacher, teaching assistant or SENCO. The questions are about school practice and your own experiences of supporting pupils to improve their language abilities. It should take no more than 15 minutes to complete.

We would be very grateful if you could complete this by Friday 5 July.

For any questions about this evaluation please contact: LanguageLink@shu.ac.uk

School name

School postcode

What is your role in the school? Please tick all that apply:

- Headteacher (1)
- Deputy or Assistant Head (2)
- SENCO (3)
- Teacher (4)
- Teaching Assistant (5)
- Higher Level Teaching Assistant (6)
- Higher Level Teaching Assistant with SLCN responsibility (7)

Since September 2023 have you adopted any speech and language interventions other than ILL? (**intervention schools**)

- Yes (specify which)
- No

Since September 2023 have you adopted any speech and language interventions? (**control schools**)

- Yes (please specify which)
- No

Has there been a change in your speech and language practices with the children? (control schools)

- Yes (please specify)
- No

Have staff received any additional training in supporting children with speech and language since September 2023?
(control schools)

- Yes (please provide details)
- No

Since September 2023 have staff received any additional training in supporting children with speech and language besides the training from Infant Language Link? (intervention schools)

- Yes (please provide details)
- No

Fidelity questions (intervention only)

Have you made use of the ILL Helpdesk since the start of the intervention?

- Yes
- No

How effective was the advice you received from the ILL Helpdesk?

- Not effective at all (1)
- Not effective (2)
- Moderately effective (3)
- Effective (4)
- Highly effective (5)

Has there been uptake in other classes beyond the compulsory Y1 class?

- Yes, uptake in other Y1 classes
- Yes, uptake in FS2
- No

Questions about screening (all)

What methods do you currently use to identify children needing support with speech and language? (tick all that apply)

- Using a speech and language screening tool (specify which one) (1)
- Detailed speech, language and communication assessment by a speech and language therapist (2)
- Using a tracker tool (for example TalkBoost tracker) (3)
- Discussing children’s speech and language needs with their parents (4)
- Reports of parental concern (5)
- Observing and assessing children’s speech and language as part of daily interaction (6)

Questions about screening (intervention only)

In your opinion how effective is the ILL screening tool for identifying speech and language needs early?

- Not effective at all (1)
- Not effective (2)
- Moderately effective (3)
- Effective (4)
- Highly effective (5)

In your opinion is the ILL screening tool more effective than others you have experience with for identifying speech and language needs early?

- Strongly disagree (1)
- Disagree (2)
- Agree (3)
- Strongly Agree (4)

Questions about whole class approach (intervention only)

Have you, the Year 1 teacher, implemented the ILL Core strategies in the classroom? (teacher only)

	Yes, in every lesson	Yes, frequently	Yes, infrequently	Not used
Break it down				
Explain clearly				
Check as you go				
Keep it visual				

Have you, the Year 1 teacher, used the ILL whole class resources? (teacher only)

- Yes
- No

If no, please provide a reason:

As a result of using the ILL programme has there been an improvement in:

	Strongly disagree	Disagree	Agree	Strongly agree
Children's understanding of language used in the classroom				
Children's social confidence and participation with others (peers, teachers)				
Children's confidence engaging in learning activities				

Questions about carryover activities and discussions (intervention only)

How useful did you find the following elements of the ILL programme for tracking children's progress in speech and language:

Teacher Rating of Pupil Engagement sheets:

- Very useful
- Useful
- Not very useful
- Not useful at all

Tracking sheets completed in intervention sessions:

- Very useful
- Useful
- Not very useful
- Not useful at all

For each of the intervention groups, how often did you use any carryover activities and strategies from the small group sessions into the whole class?

	Never	Less often than once a week	Once a week	Twice a week
Listening group				
Concepts and instructions				
Language structure				

How often did you and the ILL intervention designated TA have conversations about the children's progress in targeted intervention sessions: **(teacher only)**

- Never
- Less often than once a week
- Once a week
- Twice a week

How often did you and the Y1 teacher have conversations about the children's progress in targeted intervention sessions:
(TA only)

- Never
- Less often than once a week
- Once a week
- Twice a week

Questions about targeted intervention sessions (intervention only)

How useful did you find the use of targeted ILL sessions for developing children's

	Very useful (1)	Useful (2)	Not very useful (3)	Not useful at all (4)
Phonological awareness (an understanding of the sound structure of the spoken language) (1)				
Expressive or receptive vocabulary (the ability to use or understand words) (2)				
Expressive language (children's ability to use language in an accurate and coherent manner) (3)				
Comprehension or receptive language (children's ability to understand complex language forms including grammar and inferential use of language) (4)				

Were EAL children included in the targeted intervention groups?

- Yes
- No
- Not sure

Do you intend to continue using the programme next school year?

- Yes, intend to continue with current year 1 pupils going into year 2
- Yes, intend to offer to year 1 pupils again
- Yes, intend to introduce to year 1 and reception pupils
- Do not intend to continue offering the programme

In my teaching I use this strategy:

	Frequently (1)	Sometimes (2)	Rarely (3)	Not yet used (4)
Slowing down (1)				
Reducing the load (2)				
Thinking about vocabulary levels (3)				
Giving extra time (4)				
Using repetition (5)				

Rate your agreement with these statements:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Developing children's oral skills should be a priority for Y1 pupils (1)					
Teaching strategies targeting oral language development should be used in every Y1 lesson (2)					
Some Y1 children would benefit from targeted (small group) speech and language interventions (3)					

Please rate how confident would you say you are in supporting children in the following areas :

	Very short of confidence (1)	Somewhat lacking in confidence (2)	Neither confident or not (3)	Confident (4)	Extremely confident (5)
Phonological awareness (an understanding of the sound structure of the spoken language) (1)					
Expressive or receptive vocabulary (the ability to use or understand words) (2)					
Expressive language (children's ability to use language in an accurate and coherent manner) (3)					
Comprehension or receptive language (children's ability to understand complex language forms including grammar and inferential use of language) (4)					

Please rate your confidence in the following:

	Very short of confidence (1)	Somewhat lacking in confidence (2)	Neither confident or not (3)	Confident (4)	Extremely confident (5)
Identifying children with below average speech and language skills (1)					
Differentiating between the speech, language and communication development needs of all children and the development needs of those children who need more intensive SLC support. (2)					
Supporting children with below average speech and language needs (3)					
Using whole class strategies to support understanding and development of oral language skills in children (4)					
Using oral language strategies and appropriate feedback during taught sessions or when working with children individually. (5)					
Creating a communication friendly environment in every lesson (6)					

Question to address IPE RQ6:

Were there any unforeseen changes concerning the school, staff or children which impacted on delivering the ILL intervention? (box to explain)

Question to address IPE RQ7:

Were there any unintended consequences for the school, staff or children as a result of delivering the ILL intervention? (box to explain)

Appendix I: Creating a combined language variable

To start exploring the relationship between the separate scales derived from the pupil assessments undertaken at baseline, pairwise correlations between the variables were examined. As would be expected, the two CELF scales and the two RAPT scales correlate most strongly with one another. However, the CELF scales also correlate with the RAPT scales to at least 0.5. This suggests some relationship between receptive language, as measured by the two CELF subscales, and expressive language, as measured by the RAPT. The four scales also have a Cronbach's alpha of 0.85. Again, this suggests that the four language scales all represent a single underlying language variable.

Table 1: Pairwise correlations between outcomes

	CELF LC	CELF SC	RAPT Grammar	RAPT Information
CELF LC	1			
CELF SC	0.65	1		
RAPT Grammar	0.52	0.50	1	
RAPT Info	0.52	0.49	0.78	1

Cronbach's alpha 0.85. N= 3021

Running a factor analysis in Stata 17 with the four language scales entered as the source variables produces the results displayed in Table 6. The eigenvalues indicate that a single factor solution would make the most sense. This is further evidence that the four language scales all represent a single underlying language variable.

Table 2: Factor analysis results

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	2.29	2.05	1.04	1.04
Factor2	0.24	0.39	0.11	1.15
Factor3	-0.15	0.03	-0.07	1.08
Factor4	-0.18	.	-0.08	1

LR test: independent vs. saturated: $\chi^2(6) = 5801.05$ Prob> $\chi^2 = 0.0000$

As mentioned above, a single standardised scale from the four sub scales can be created using the generate option with the 'alpha' command in Stata 17. It is also possible using the approach adopted in Sibietta et al (2016), where the four scales were standardised and summed, with the resulting variable then standardised again. Our preference is to use the latter method for constructing the primary outcome measure for this trial. A key priority is to create a combined scale that gives equal weight to the different language scales. This would achieve that aim. The code for generating this outcome variable is presented in Appendix E.

A combined outcome variable derived through structural equation modelling was also considered. Fitting a structural equation model with the four language variables results in goodness of fit indicators that are short of the recommended thresholds (RMSEA below 0.06, and CFI of at least 0.95, see Hu and Bentler 1999). The basic specification with no

covariances added has RMSEA 0.34 and CFI 0.88. Adding one covariance increases the CFI to above 0.9 but also increases the RMSEA to 0.42 or 0.43 depending on which covariance is added. There is some disagreement over which cut off points to apply (see Lai and Green 2016:220 for a summary), yet these RMSEA values would not be deemed satisfactory by any measure. Table 7 below shows the goodness of fit values for the SEM with no covariances, and then for a series of models each incorporating one covariance, between one of the CELF subtests and one of the RAPT scoring components.

Further examination of the data included adding a covariance between both CELF subtests, and between both RAPT components. The results are very different, indicating what appears to be a good fit (CFI = 1, TLI = 1, RMSEA < .001). However, in this trial we would expect all pairs of language scales to correlate, but with stronger correlations between the two CELF scales and two RAPT scales. This is corroborated by the correlation coefficients presented in Table 5 above.

When adding two covariances, one for both RAPT scales and another for both CELF scales, the model will not converge. This means that one pair or the other would need to be selected but as both pairs are correlated it does not seem tenable to choose between them.

As the SEM model does not show a good fit of the data, adopting a different approach to combining the different language measures into a single primary outcome is justified. Ordinarily when SEM produces disappointing results, improved model fit could be sought by removing or adding certain items, yet here that is not an option. None of the separate language scales can be omitted as the different assessments all measure different dimensions of language and communication ability which are equally relevant to the intervention. Removing individual items from the scales is not tenable as each is part of an established measure that is not validated for such selective use.

Table 9 in the evaluation report shows that all combined language outcome variables are imbalanced at baseline with effect sizes of -0.10 irrespective of how the separate scales are combined. However, as all baseline assessment data was collected prior to randomisation, this is likely to be due to chance. Schools or assessment administrators were not aware of treatment allocation at the time of data collection, so it is not possible that baseline assessment performance was affected by this.

Table 3: Comparison of goodness of fit indicators for different SEM models (with and without covariances)

Fit statistic	Basic	Celf_LC* R_Info	Celf_SC* R_Info	Celf_LC* R_Grammar	Celf_SC* R_Grammar
Likelihood ratio					
chi2_ms(2)	705.87	565.37	536.35	536.35	565.37
p > chi2	0.00	0.00	0.00	0.00	0.00
chi2_bs(6)	5805.21	5805.21	5805.21	5805.21	5805.21
p > chi2	0.00	0.00	0.00	0.00	0.00
Population error					
RMSEA	0.34	0.43	0.42	0.42	0.43
90% CI, lower bound	0.32	0.40	0.39	0.39	0.40
upper bound	0.36	0.46	0.45	0.45	0.46
pclose	0.00	0.00	0.00	0.00	0.00
Information criteria					
AIC	72567.18	72428.68	72399.66	72399.66	72428.68
BIC	72639.34	72506.86	72477.84	72477.84	72506.86
Baseline comparison					
CFI	0.88	0.90	0.91	0.91	0.90
TLI	0.64	0.42	0.45	0.45	0.42
Size of residuals					
SRMR	0.09	0.07	0.07	0.07	0.07
CD	0.88	0.97	0.97	0.99	0.96

Appendix J: School staff survey results from IPE RQ2

Table 4: Frequency of using teaching strategies

	Frequently	Sometimes	Rarely	N
<i>Slowing down</i>				
Control pre	75.0%	20.8%	4.2%	24
Control post	82.1%	17.9%	0.0%	28
Intervention pre	80.0%	20.0%	0.0%	25
Intervention post	85.0%	10.0%	5.0%	20
<i>Reducing the load</i>				
Control pre	70.8%	29.2%	0.0%	24
Control post	79.3%	17.2%	3.4%	29
Intervention pre	64.0%	32.0%	4.0%	25
Intervention post	65.0%	35.0%	0.0%	20
<i>Thinking about vocabulary levels</i>				
Control pre	79.2%	16.7%	4.2%	24
Control post	89.7%	10.3%	0.0%	29
Intervention pre	60.0%	40.0%	0.0%	25
Intervention post	60.0%	40.0%	0.0%	20
<i>Giving extra time</i>				
Control pre	82.6%	17.4%	0.0%	23
Control post	89.7%	10.3%	0.0%	29
Intervention pre	84.0%	16.0%	0.0%	25
Intervention post	70.0%	30.0%	0.0%	20
<i>Using repetition</i>				
Control pre	95.8%	4.2%	0.0%	24
Control post	100.0%	0.0%	0.0%	28
Intervention pre	96.0%	4.0%	0.0%	25
Intervention post	95.0%	5.0%	0.0%	20

Respondents: teachers responding to both pre and post surveys (but not necessarily every item). Row percentages

Table 5: Perceived ease or difficulty in engaging Year 1 pupils in classroom activities (teacher responses)

	Baseline Control		Post Control		Baseline Intervention		Post-Intervention	
	Mean	N	Mean	N	Mean	N	Mean	N
Taking an active part in classroom activities	2.17	24	1.93	29	2.42	24	2.38	21
Organising and using their materials for tasks	2.57	23	2.59	29	3.08	24	2.67	21
Listening during classroom tasks	2.96	24	2.59	29	3.29	24	2.71	21
Collaborating with peers during lessons and play	2.57	23	2.62	29	2.88	24	2.86	21
Ability to learn new words	2.50	24	2.24	29	2.58	24	2.62	21
Ability to ask for help in class	2.35	23	2.10	29	2.75	24	2.71	21
Being able to understand and answer questions	2.88	24	2.45	29	3.00	24	2.71	21

Respondents: teachers responding to both pre and post surveys (but not necessarily every item). 1=Extremely easy, 5=extremely difficult.

Table 6: Teacher confidence in aspects of teaching language and communication

	Baseline Control		Post Control		Baseline Intervention		Post-Intervention	
	Mean	N	Mean	N	Mean	N	Mean	N
Phonological awareness (an understanding of the sound structure of the spoken language)	4.30	23	4.24	29	4.20	25	4.10	21
Expressive or receptive vocabulary (the ability to use or understand words)	3.52	23	3.66	29	3.80	25	3.86	21
Expressive language (children's ability to use language in an accurate and coherent manner)	3.57	23	3.62	29	3.80	25	3.86	21
Comprehension or receptive language (children's ability to understand complex language forms including grammar and inferential use of language)	3.61	23	3.62	29	3.52	25	3.86	21
Identifying children with below average speech and language skills	3.75	24	3.79	28	3.80	25	3.76	21
Differentiating between the speech, language and communication development needs of all children and the development needs of those children who need more intensive SLC support.	3.04	24	3.10	29	3.16	25	3.38	21
Supporting children with below average speech and language needs	3.17	24	3.34	29	3.24	25	3.38	21
Using whole class strategies to support understanding and development of oral language skills in children	3.33	24	3.55	29	3.40	25	3.57	21
Using oral language strategies and appropriate feedback during taught sessions or when working with children individually.	3.42	24	3.69	29	3.40	25	3.67	21
Creating a communication friendly environment in every lesson	3.75	24	3.93	29	4.04	25	4.05	21

Respondents: teachers responding to both pre and post surveys (but not necessarily every item). 1= Very short of confidence, 5=Very confident

Table 7: Perceived ease or difficulty in engaging Year 1 pupils in classroom activities (TA responses)

	Baseline Control		Post Control		Baseline Intervention		Post Intervention	
	Mean	N	Mean	N	Mean	N	Mean	N
Taking an active part in classroom activities	2.25	8	1.44	9	2.33	15	2.67	15
Organising and using their materials for tasks	2.25	8	1.78	9	3.07	15	3.21	14
Listening during classroom tasks	2.75	8	2.11	9	3.13	15	3.21	14
Collaborating with peers during lessons and play	2.71	7	2.11	9	2.73	15	2.71	14
Ability to learn new words	2.50	8	1.67	9	2.73	15	3.14	14
Ability to ask for help in class	2.63	8	2.11	9	2.53	15	2.93	14
Being able to understand and answer questions	3.00	8	2.11	9	3.13	15	3.07	14

Respondents: TAs responding to both pre and post surveys (but not necessarily every item). 1=Extremely easy, 5=extremely difficult.

Table 8: TA confidence in aspects of teaching language and communication

	Baseline Control		Post Control		Baseline Intervention		Post-Intervention	
	Mean	N	Mean	N	Mean	N	Mean	N
Phonological awareness (an understanding of the sound structure of the spoken language)	3.88	8	3.89	9	3.93	15	4.06	16
Expressive or receptive vocabulary (the ability to use or understand words)	3.57	7	3.88	8	3.40	15	3.81	16
Expressive language (children’s ability to use language in an accurate and coherent manner)	3.50	8	3.88	8	3.27	15	3.75	16
Comprehension or receptive language (children’s ability to understand complex language forms including grammar and inferential use of language)	3.13	8	4.00	7	3.13	15	3.69	16
Identifying children with below average speech and language skills	3.75	8	4.11	9	3.27	15	3.56	16
Differentiating between the speech, language and communication development needs of all children and the development needs of those children who need more intensive SLC support.	3.63	8	3.78	9	2.73	15	3.19	16
Supporting children with below average speech and language needs	3.43	7	3.44	9	3.20	15	3.69	16
Using whole class strategies to support understanding and development of oral language skills in children	3.25	8	3.56	9	3.00	15	3.07	15
Using oral language strategies and appropriate feedback during taught sessions or when working with children individually.	3.38	8	3.78	9	3.00	15	3.44	16
Creating a communication friendly environment in every lesson	3.88	8	3.56	9	3.27	15	3.69	16

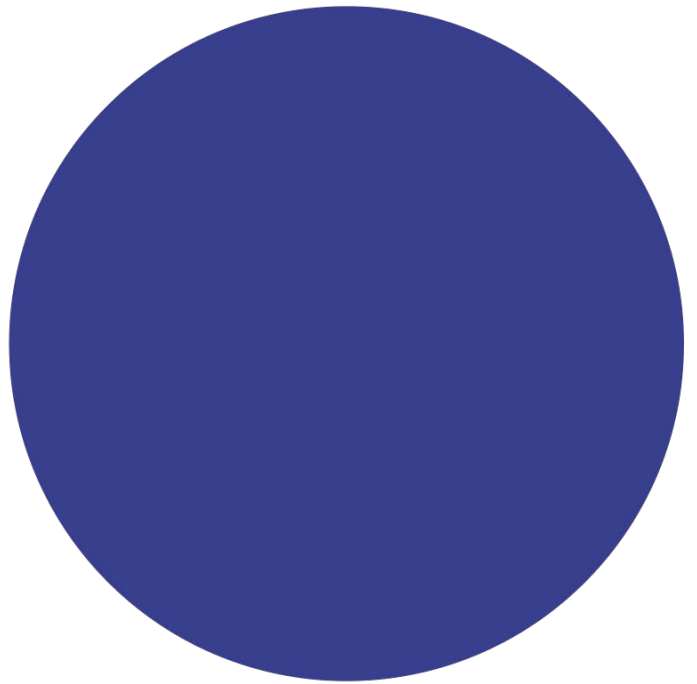
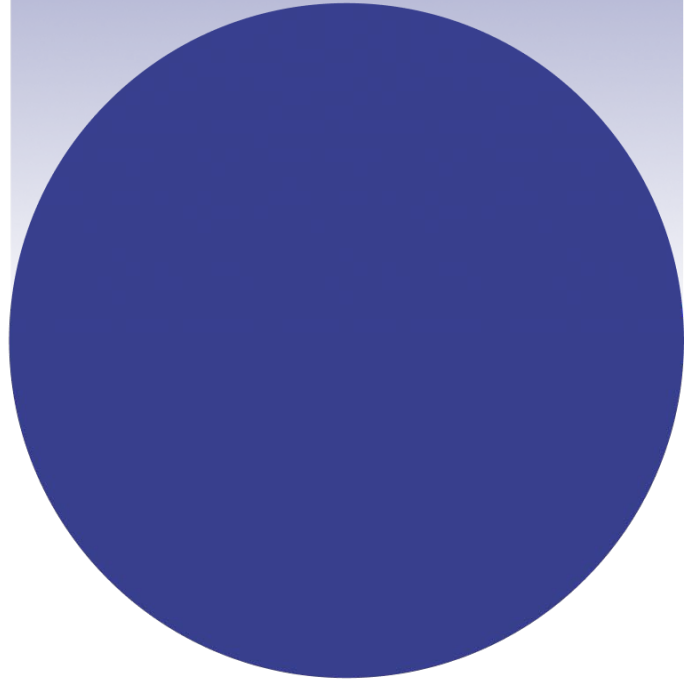
Respondents: TAs responding to both pre and post surveys (but not necessarily every item). 1= Very short of confidence, 5=Very confident

You may re-use this document/publication (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0.

To view this licence, visit <https://nationalarchives.gov.uk/doc/open-government-licence/version/3> or email: psi@nationalarchives.gsi.gov.uk

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned. The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.

This document is available for download at <https://educationendowmentfoundation.org.uk>



**Education
Endowment
Foundation**

The Education Endowment Foundation
5th Floor, Millbank Tower
21-24 Millbank
London
SW1P 4QP

<https://educationendowmentfoundation.org.uk>

 [@EducEndowFoundn](https://twitter.com/EducEndowFoundn)

 [Facebook.com/EducEndowFoundn](https://www.facebook.com/EducEndowFoundn)