

## EVALUATION SUMMARY

Age range	Children aged 3+ years in nursery school classes
Number of pupils	Approx.1560
Number of schools	120
Design	Two-armed (five month) cluster randomised controlled trial (random allocation at school level)
Primary Outcome	Children's language and communication development as measured by assessment Clinical Evaluation of Language Fundamentals Preschool 2 UK (CELF- Preschool 2 UK) pre- and post-intervention
Date of Protocol	
Version	1

### Independent Evaluation of the EasyPeasy programme

#### A two-arm 5 month randomised controlled trial

#### TRIAL PROTOCOL

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## BACKGROUND, SIGNIFICANCE AND INTERVENTION

**Table 1: Description of the intervention using The Template for Intervention Description Replication (TIDieR) framework**

TIDieR* FRAMEWORK	DESCRIPTION
Name of intervention	EasyPeasy
Why? Rationale	<p>The attainment gap between the richest and the poorest pupils begins at an early age; before the start of school. Tackling this disparity early on is critical to breaking the cycle of disadvantage and improving social mobility.</p> <p>It is well documented that children from disadvantaged backgrounds have lower attainment on entry to school than those more socioeconomically advantaged (e.g. Tymms <i>et al.</i> 2014), with children's language and communication skills at this point being a good indicator of school readiness, as well as later educational attainment (e.g. Snow <i>et al.</i>, 1998). Hart and Risley (1995) have shown that by the age of four, children from disadvantaged backgrounds have been exposed to as many as 30 million fewer words than children from advantaged background. Bruner's (1975; 1983) and Vygotsky's (1962) understanding of the early learning environment is widely accepted. They both postulated that learning occurs in a socio-cultural context in which adult/caregivers 'scaffold' young children to higher levels of thinking and acting. In line with this view, children who experience a cognitively stimulating home environment early in development are at an advantage in the learning process. The quality of the early home learning environment is related to availability of quality educational resources (Melhuish <i>et al.</i> 2008), and evidence suggests disadvantaged households are associated with having lower quality educational resources (Foster <i>et al.</i> 2005). Early intervention at this stage, specifically in tailoring the activities parents do with their children, can have a positive impact on cognitive ability and later life outcome (Lugo-Gill and Tamis-LeMonda, 2008; 2008a, b) and whilst stimulating activities may help children with specific skills (e.g. linking letters to sounds) it may also develop the child's ability and motivation towards learning more generally (Melhuish 2010).</p> <p>Although there is extensive evidence of the link between early intervention and positive later outcomes, it can be difficult to get parents involved in their child's learning. Previous research by Jelley, Sylva &amp; Karemaker (2016) has suggested that EasyPeasy is an effective way to improve parental engagement and through this, to accelerate children's cognitive development, in particular their self-regulation, and school readiness*.</p>

	<p>EasyPeasy is a smartphone app for parents of preschool aged children. It is designed to improve early child development through increasing positive parent-child interactions and learning at home. The app sends regular game ideas to parents that they can play with their children, combined with a text schedule which includes information on child development and explanation of each of the games. The design of the app applies behavioural insights to help seed positive habits of play and interaction at home by sending tailored prompts, encouragement, and reminders to parents.</p> <p>Parents receive EasyPeasy communications via text message (SMS). Parents receive a series of videos via SMS which demonstrate games (weekly) and separate text explanations (known as the 'text schedule' of each game, encouraging them to play with their children.</p> <p>EasyPeasy also provides a function whereby the child's early years provider can track parental engagement with the app and create digital communities for parents to communicate and share experiences of the EasyPeasy activities (Jelley <i>et al.</i> 2016).</p> <p>In a previous evaluation, Jelley <i>et al.</i>, (2016) reported that EasyPeasy led to moderate positive effects on parenting self-efficacy and on children's cognitive self-regulation (parental reports), an increase in parental consistency with discipline and boundaries and improvements to child concentration and persistence (parental reports). The EasyPeasy app presents as a low-cost, accessible, non-intrusive intervention that does not place great demands on parents' time or resources. As the content is evidence-based, covering all areas of the Early Years curriculum, the app shows potential as a quality learning resource to support parents and positively impact on the home learning environment and early years attainment.</p>
Who? Recipients	<p>Intervention providers: EasyPeasy</p> <p>Primarily the intervention will be evaluated with children in nursery classes attached to state schools in England. Eligible children will be aged 3+ and due to enter Reception class in the academic year 2018/19.</p> <p>School level implementers/providers: At least one early years teacher will receive training from EasyPeasy to implement the programme within their setting, who will be responsible for the recruitment of parents into the programme and for the setting's pod administration used to foster continued parental engagement.</p>

	<p>At home providers: Parents are ultimately responsible for engaging with the app and delivering the game contents to their children.</p>
What? Materials used	<p>Within each school, a teacher or nursery practitioner will be nominated as the ‘Pod Leader’ to oversee parental engagement with the app (described further in next section). The nominated Pod Leader will receive relevant training via webinar. Training will last approximately two hours and will provide instructions of how to facilitate EasyPeasy and navigate their school’s ‘Pod’ (described further below) within their school to maximise parental engagement.</p> <p>Parents receive a link to the App via their mobile phone. Subsequent programme delivery is digital via the Pod Leader dashboard for teachers and via SMS messages containing links for parents.</p>
What? Procedures, activities and/or processes	<p>This section has been taken directly from Jelley (2016) with permission from EasyPeasy:</p> <p>The EasyPeasy app has been designed to integrate with local early years settings, such as children’s centres, primary schools, and nurseries, and function as a digital outreach service that extends the reach and impact of the setting and practitioner workforce. A secondary desktop component allows practitioners in these settings to share and communicate with parents, as well as capture information on parent engagement with the app. When used by settings, parents are typically organised into small groups or ‘Pods’ on the app, providing a virtual support network where they can discuss the games, and the challenges and successes of using them to engage their children. Each ‘Pod’ is overseen by a Pod Leader, a practitioner from the setting who monitors parents’ progress and offers remote support.</p> <p>Parents receive EasyPeasy communications via text message (SMS). An initial SMS invites them to join EasyPeasy through a personalised message from their local practitioner or teacher, and includes a link to ‘get started’. When the parent clicks on the link, they are taken to a personal dashboard that presents them with an initial bank of games to explore. Each game is presented through a short video clip, and a short set of written instructions. Parents will then receive a series of SMS reminders throughout the intervening weeks, releasing new games (weekly), and encouraging them to play with their children. In the school holidays, parents will receive an extra game.</p> <p>The games in the app are shared with parents via short video clips that feature real families playing the games in their own living rooms. The clips are between one and three minutes long</p>

	and include tips and hints through small ‘pop up’ animations.
Who? Providers/implementers	<p>Intervention providers: EasyPeasy</p> <p>School level implementers/providers: At least one early years teacher the ‘Pod Leader’ will receive training from EasyPeasy to implement the programme within their setting. The Pod Leader will be responsible for the recruitment of parents into the programme as well as for fostering continued parental engagement.</p> <p>At home providers: Parents are ultimately responsible for engaging with the app and playing the games with their children.</p>
How? Mode of delivery	See above section for description of materials, processes and activities
Where? Location of delivery	<p>Local Authorities (LAs) will be approached and invited to participate in the research. The role of the LAs is to contribute to the funding of EasyPeasy, and to extend an invitation to participate to eligible schools in their area. Eligible schools are those that are state-funded, with nurseries that have provision for children 3+. Schools will be recruited that have a high percentage of pupils in receipt of free school meals (FSMEVER &gt;30%).</p> <p>Schools with &lt;30% FSMEVER or private, voluntary or independent (PVI) nurseries could be used as a back-up if recruitment of schools with preferred characteristics is problematic.</p>
When and how much? Duration and dosage	The EasyPeasy app delivers one different game per week, including a text schedule (providing explanation of how the games impact on child cognitive development) over a five month period. The text schedule is dynamic, and changes over the course of the 20 weeks. Parents will receive 27 games in total over the delivery period.
Tailoring and adaptation	<p>The EasyPeasy programme has been developed to be delivered over a one year period. For the purposes of this evaluation, EasyPeasy will deliver content (27 games) over 5 months/20 weeks to participating schools.</p> <p>Following the purchase of EasyPeasy it is usual practice that the app would be offered to all parents via initial invitation text initiated by the setting. At this point parents can opt-out of receiving the programme by telling their Pod Leader. Within the context of this research project it is necessary for parents to provide written opt-in consent for their participation in EasyPeasy on the assumption that their child’s early years setting will receive the app in January 2018 or September 2018. At this stage parents will also be requested to provide consent for their child to participate in pre-and post-intervention data collection and consent for their child’s data to be shared between participating organisations. Parents will be given the option to agree to use EasyPeasy but not agree to participate in</p>

	<p>the evaluation.</p> <p>As EasyPeasy is a setting level programme parents of both nursery and reception aged children may choose to use the app. In these settings, separate pods will be set-up and implemented for the two cohorts, and in some of these cases two separate Pod Leaders will manage each Pod. This is so the nursery Pod Leader is not overburdened given the additional commitment they have to the evaluation. It is important to note that the nursery pod may include parents of children who do not fit the trial's eligibility criteria or who have agreed to use EasyPeasy but not agreed for their child to take part in the evaluation. As such, 'weekly pod reports' could contain data for all of these types of users.</p> <p>Usually pod-leader training is completed face-to-face. For the purposes of the trial, pod leader training will be conducted via webinar.</p> <p>Nursery teachers may choose to adapt the level of interaction with parents in relation to the EasyPeasy programme, e.g. linking lessons to games, talking to parents about engaging with the games.</p>
How well (planned?): strategies to maximize effectiveness	<p>A wait-list incentive strategy will be adopted to increase school-level recruitment. Here, all schools will receive the intervention; schools randomly allocated to the intervention will receive the intervention in 2017-18, for schools randomly allocated to the control group they will receive the intervention in 2018-19 for use with their 3+ cohort. This ensures the 2017-18 control group of 3+ year old children do not ever receive the intervention. It is important to note that it is the 2017-18 cohort that is of interest within the context of this evaluation.</p> <p>The evaluation team and EasyPeasy team have worked collaboratively to develop parental information sheets and consent forms to thoroughly explain the EasyPeasy app (including its aims, how it works, simplicity of use, child-friendly) and evaluation components.</p> <p>EasyPeasy will provide quality training to Pod Leaders to maximise engagement with the programme from the beginning.</p> <p>The EasyPeasy app is simple and quick for parents to access and engage with, as is the pod dashboard for Pod Leaders.</p>

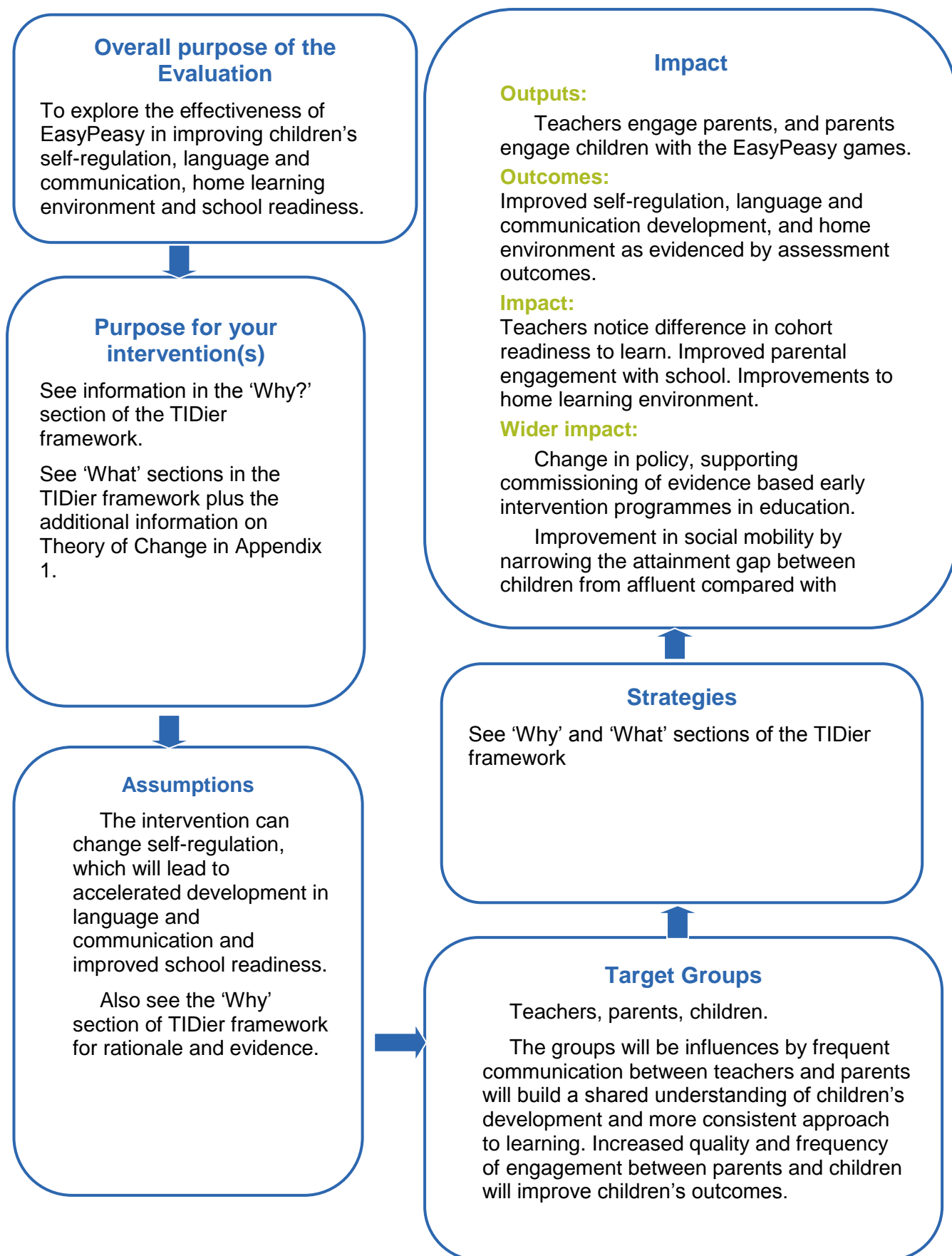
## **METHODS**

### **RESEARCH QUESTIONS**

1. What is the impact of the EasyPeasy intervention on the language and communication development of children aged 3-4 years old? [Primary Outcome]
2. What is the impact of the EasyPeasy intervention on the self-regulation of children aged 3-4 years old? [Secondary Outcome 1]
3. What is the impact of the EasyPeasy intervention on the social-emotional development of children aged 3-4 years old? [Secondary Outcome 2]
4. How effective is the EasyPeasy intervention at improving the home learning environment of children aged 3-4 years old? [Secondary Outcome 3]



**Figure 1: EasyPeasy Theory of Change**



## DESIGN

We propose a pragmatic two armed cluster randomised controlled trial. Settings will be allocated into one of two groups on a 1:1 ratio to:

- Intervention – settings allocated to receive the EasyPeasy intervention (a five-month intervention); or
- Control – settings allocated to continue with usual early years.

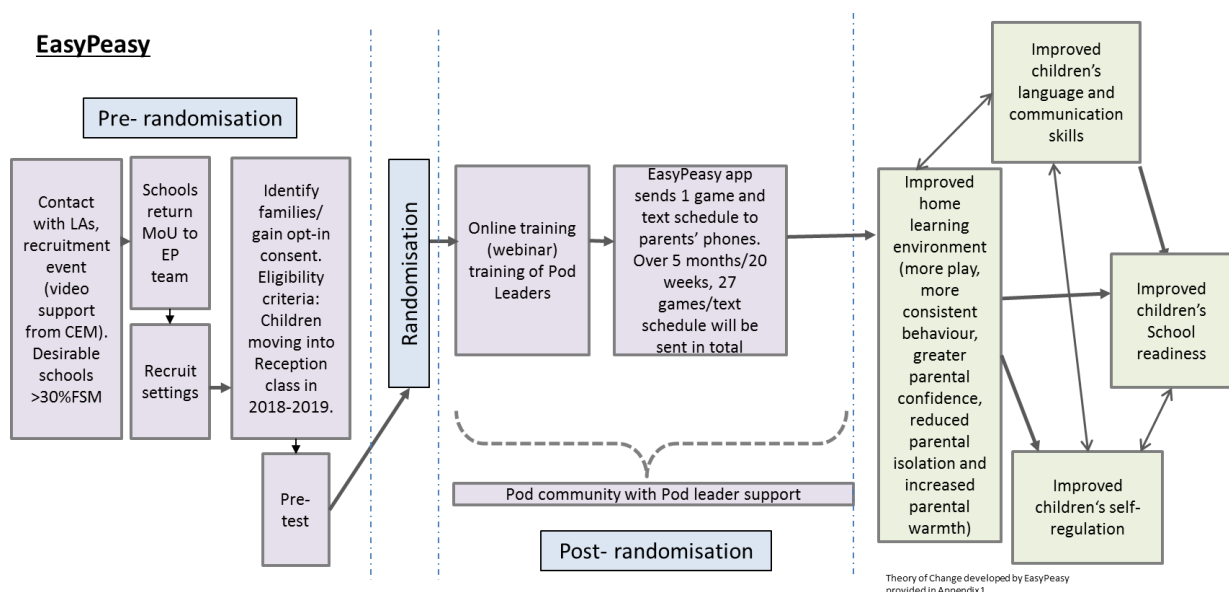
## RANDOMISATION

Minimisation will be undertaken to ensure settings across the two groups are balanced on eligible cohort size. This is to avoid an imbalance between the control and intervention groups of different proportions of eligible children. This data will be collected from schools by the evaluation team. This process, including cut-off for each group, will be detailed in the Statistical Analysis Plan (SAP) and undertaken by an independent study statistician to ensure that the allocation is concealed.

## PARTICIPANTS

The flow of participants throughout the trial is summarised by the EasyPeasy Logic Model, detailed in Figure 2.

**Figure 2: EasyPeasy Logic Model**



## SCHOOLS

A sample of 108 schools with nursery classes is required so initial recruitment will target 120 settings to account for attrition. 60 settings will be randomly allocated to each arm to ensure that the trial is sufficiently powered with a low level of setting-level attrition.

Participating schools are only eligible to take part in the study if they agree to all of the study requirements outlined in the Memorandum of Understanding (MoU) which describes their commitment to the delivery of EasyPeasy and participation in the recruitment of a minimum number of families to the trial ( $n=13$ ) and administration of the measures (Appendix 2). Whilst schools are required to gain a minimum number of consent forms from

parents/guardians whose children fit the eligibility criteria (detailed in the next section), EasyPeasy is a setting level intervention and parents/guardians from of both nursery and reception aged children will be invited to join.

Eligible settings should be state funded schools whose child population includes children who are three years old. The recruitment of schools with an average ever-Free School Meal (FSM) percentage of >30 overall is desirable to ensure we are targeting those with the highest levels of deprivation. Schools with <30% FSMEVER PVI nurseries could be used as a back-up if recruitment of schools with preferred characteristics is problematic. Eligible schools should not have previously been involved in the EasyPeasy intervention.

The school recruitment process for the trial will be led by EasyPeasy and supported by the evaluation team at Durham. Setting recruitment will take place in two phases. The first phase will involve liaison with and the recruitment of LAs by the EasyPeasy team. LAs will provide a contribution towards the cost of purchasing EasyPeasy for each school who sign up to the trial with the remaining cost being covered by EEF. The EasyPeasy programme will be of no cost to participating schools except for schools in Doncaster LA who will be asked to contribute £250 to the LA directly during recruitment. The second phase of recruitment will consist of outreach activities led jointly by EasyPeasy and LA partners. Eligible schools will firstly receive information about the trial through a mail out and advised that their participation in the trial is determined on a 'first come first served basis' and that a limited number of places are available. Schools are to return signed MoUs to EasyPeasy in the first instance, who will share these with the evaluation team. If response rates appear low within an LA, EasyPeasy will organise a recruitment event for schools to attend. A member of the evaluation team will be present in person or contribute via webinar to explain each school's role and responsibilities as part of the trial should they choose to sign-up. It is up to individual schools to indicate their willingness to participate in the trial via submission of the MoU to the research partners (EasyPeasy and the Evaluation team).

Each school will be responsible for nominating a staff member to manage their participation and contribution to the trial. It is this staff member who will also take on the role of 'Pod Leader' should the school be randomly allocated to receive the intervention.

Schools will not receive a financial incentive for participating in components of the evaluation; regardless of their allocation all schools will – at some point- receive the EasyPeasy programme as incentive for participating in the trial. Schools which are allocated to the intervention group will receive the EasyPeasy programme for use during the academic year of 2017-18. Schools randomly allocated to the control group will receive the EasyPeasy programme for use during the academic year of 2018-19. This wait-list method will ensure the 2017-18 control cohort do not receive the intervention at any point but all schools do get use of the programme. LA's will be informed of the allocation (intervention/control) of the schools in the area.

### **PARENTS/CARERS AND CHILDREN**

Parents of children who are three years old at the start of the intervention and due to start reception class in September 2018-19 will be eligible to participate in the trial. EasyPeasy pilot data reported that access to smart phones, via which EasyPeasy is accessed, was not a barrier even in lower income families (Jelley *et al.*, 2006). Following the purchase of

EasyPeasy it is usual practice that the app would be offered to all parents via initial invitation text initiated by the setting. At this point parents/carers can opt-out of receiving the programme by informing their Pod Leader. Within the context of this research project it is necessary for parents/carers of 3+ year olds to provide written opt-in consent for their participation in the EasyPeasy on the assumption that their child's early years setting may or may not be randomly allocated to receive the programme during their child's duration at nursery. Parents/guardians of eligible children will be informed of the trial via an information letter developed collaboratively by the research partners, and passed on to them by the school. Here, parents/guardians will be required to give opt-in consent for their child to participate in the pre- and post-intervention testing (see Appendix 3). At this stage parents/carers will also be requested to provide consent:

- a) For their child to participate in pre-and post-intervention data collection
- b) For their child's data to be shared between the research teams
- c) For their child's data to be archived within the EEF database
- d) For the evaluation team to contact them by telephone, email and/or post to collect school destination data for their child, should their child's early years provider not know this. This is data so that children's educational attainment can be tracked, long-term, using the National Pupil Database (NPD). In some instances children are not assigned a Unique Pupil Number (UPN) until they reach reception class; however the child's name, date of birth and school destination is sufficient for linkage to NPD. It is anticipated that children's UPN or school destination data for each child will be collected from the schools directly, however, in event that these data are unavailable; the evaluation team will contact parents directly.

Parents/carers will be given the option to opt-in to use EasyPeasy but opt-out to participate in the evaluation.

## **OUTCOME MEASURES**

Table 2 provides a summary of the Primary and Secondary outcomes and data collection methods.

***Table 2: Description of Outcome Measures and Collection Methods***

	<b>Outcome</b>	<b>Data collection method</b>	<b>Variable</b>
<b>P r i m a r y</b>	Change in children's language and communication between pre- and post- data.	Clinical Evaluation of Language Fundamentals Preschool 2 UK (CELF- Preschool 2 UK) developed by Wiig, Secord and Semel <sup>1</sup> . This will be administered to all children in the study sample by trained assessors. Administration time of relevant scales: 20-25 minutes per child.	Core Language Score, comprising: Sentence structure, expressive vocab, word structure subtest. Plus concepts and following directions subtest

<sup>1</sup> See: <http://www.pearsonclinical.co.uk/Psychology/ChildCognitionNeuropsychologyandLanguage/ChildLanguage/CELF-Preschool2UK/CELF-Preschool2UK.aspx>

<b>S e c o n d a r y</b>	Changes in children's self-regulation and social-emotional development between pre- and post-data.	Child Social Behaviour Questionnaire (CSBQ) developed by Howard and Melhuish (see Howard and Melhuish 2016). The questionnaire can be completed on paper by a class teacher/practitioner for all consented children. Completion time: ≤5 minutes.	Assessment strands reported as subscales include: Sociability, Externalising, Internalising, Prosocial, Behavioural Self-regulation, Cognitive Self-Regulation, Emotional Self-regulation
	Changes in home environment between pre- and post- data.	Home Observation and Measurement of Environment (HOME) developed by Bettye M. Caldwell and Robert H. Bradley (see Caldwell and Bradley 1984). The inventory administered to a sub-sample of 50 households split evenly between control and intervention groups. Administration time: 45-60 minutes.	Assessment strands include: Learning materials, Language stimulation, Responsivity, Academic stimulation, Boundaries, Variety of indoor/outdoor activities

### **PRIMARY OUTCOME**

The proposed primary outcome measure is child language development at the end of nursery measured using the Clinical Evaluation of Language Fundamentals Preschool 2 UK (CELF- Preschool 2 UK) which will provide a measure for expressive and receptive language skills in young children. The assessment is multiple choice and requires the child to simply point to the picture that is described by the test administrator, e.g. "point to the cat after I have pointed to the monkey"; there are multiple pictures for the child to choose from, the correct picture (cat) and other distractor pictures. Each subtest of the measure includes various question items (ranging from 20-22) and discontinuation rules. For the purposes of this trial, the following norm-referenced subtests of the measure will be implemented:

- Sentence Structure (22 Items. Discontinue rule: 5 consecutive zero scores)
- Word Structure (24 Items. Discontinue rule: 8 consecutive zero scores)
- Expressive Vocabulary (20 items. Discontinue rule: 7 consecutive zero scores)
- Concepts and Following Directions (22 Items. Discontinue rule: 6 consecutive zero scores)

For each subtest, a raw score and scaled score will be calculated. In addition, a Core Language Standard Score will be derived from Sentence Structure, Word Structure and Expressive Vocabulary. Table 3 provides a breakdown of the measure's subtests inter-correlations (devised from US data,  $n=800$ ) with Cronbach's alphas for the four subtests ranging from 0.78 – 0.84 across the ages three years and zero months to four years and 11 months.

**Table 3: CELF Preschool-2 Inter-correlations**

	<b>Sentence Structure</b>	<b>Word Structure</b>	<b>Expressive Vocabulary</b>	<b>Concepts &amp; Following Directions</b>
<b>Sentence Structure</b>				
<b>Word Structure</b>	0.53			
<b>Expressive Vocabulary</b>	0.58	0.62		
<b>Concepts &amp; Following Directions</b>	0.61	0.58	0.61	
<b>Core Language Score</b>	0.83	0.84	0.86	0.71

The four subtests from the CELF-Preschool 2 UK will be administered to all children ( $n=1560$ ) in the trial.

Independent test administrators (e.g. researchers, agency supply teachers) will conduct the assessment pre- (before randomisation) and post-intervention. Each test administrator will be required to attend mandatory training led by the evaluation team which will be held in a venue near to them. Test administrators will be blinded to the school's random allocation for post-intervention testing. The evaluation team will a sub-sample of trained assessors whilst administering the test within schools as early as possible at each data collection point to conduct a quality assurance (QA) observation. If a test administrator assists with pre-intervention data collection and were deemed satisfactory following QA, they will not need to undergo QA at post-intervention data collection.

Limitations of testing in the early years are the young age and temperament of children who may or may not be responsive at the time of testing, potentially leading to missing data. To minimise this issue, the child can be accompanied by a familiar adult during the assessment if necessary.

The evaluation team will liaise with school staff and the test administrators to arrange a suitable date for them to visit to assess the children. Visits will be scheduled on a day(s) when the most children are present at the nursery, given the variety of attendance patterns among pre-school children. There may be a small number of children for whom we have relevant consent but who are not present at the nursery (e.g. due to absence, sickness, holidays) on the day(s) the test administrator visits. Up to 10% of schools will be revisited to gather missing pre- and post-intervention data should some children be absent on the first visit collection date.

### **SECONDARY OUTCOMES**

Self-regulation and behaviour scores gathered using the Child Self-regulation and Behaviour Questionnaire (CSBQ) (Howard & Melhuish, 2016). The CSBQ is a 33 item questionnaire

pertaining to children's everyday behaviours related to children's social and emotional development and self-regulation (e.g., persists with difficult tasks and waits their turn in activities). CSBQ measures:

- Self-Regulation (Cognitive, Emotional and Behavioural)
- Sociability
- Prosocial Behaviour
- Externalising Problems
- Internalising Problems

For each item, the test administrator is asked to evaluate the child's frequency of target behaviours on a 5-point scale (not true – certainly true). All subscales contain at least 5 items. Cronbach's alphas for each subscale are as follows: Sociability = .74, Internalizing = .78, Emotional Self-Regulation = .83, Cognitive Self-Regulation = .87, Externalizing = .88, Prosocial = .89, and Behavioural Self-Regulation = .89. The assessment will be completed by the children's class teachers for all children with relevant consent pre- (prior to randomisation) and post-intervention.

The Home Observation Measure of the Environment (HOME) is intended for use by practitioners and researchers and is a descriptive profile which yields a systematic assessment of a child's home environment to measure, within a naturalistic context, the quality and quantity of stimulation and support available to the child through measuring the active receipt of inputs from objects, events and transactions occurring within the home environment (Bradley 1993). The 'Early Childhood HOME' is suitable for use among 3-6 year olds and involves a visit by a researcher to the home, and includes an interview with the main caregiver whilst the child is present and awake. It is made up of 55 items that are grouped in eight different subscales that are scored in a binary manner (YES/NO). The 6/8<sup>1</sup> subscales relevant to the learning aims of EasyPeasy and most of the EYFS include and so will be used here are:

1. Learning materials
2. Language stimulation (between child and caregiver)
3. Responsivity (verbal interaction between child and caregiver)
4. Academic stimulation
5. Modelling
6. Variety of activities and parental interaction

Totsika & Sylva (2004) note the strongest advantage of HOME is the correlation it has to measures of cognitive development, and HOME has been found to detect significant differences within disadvantaged home environments (Keltner 1994).

We are proposing that the HOME inventory be used in a sub-sample of  $n=50$  households in both intervention ( $n=25$ ) and control groups ( $n=25$ ), pre- and post-intervention. Pre-intervention HOME visits for both the intervention and control groups will be conducted in the immediate weeks following randomisation, prior to parents starting the intervention. Parents who have already provided consent for their child to participate in attainment measures as

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<sup>1</sup> Data will not be collected on the following HOME subscales: Physical environment and acceptance.



part of the evaluation will be invited to take part in the HOME visits. These visits will be conducted by the evaluator's appropriately trained Research Associate and a research assistant. As incentive to parents to participate in the HOME visits, they will be provided with a £50 Love2Shop gift voucher after the final visit.

The use of the HOME inventory will allow us to measure the impact to learning that we anticipate the EasyPeasy app could have within home environments who receive the intervention. This measure will allow us to investigate how and why the intervention leads to improvements to the home learning environment, which can be determined through analyses of the different HOME subscales i.e. is it through changes to environment, better quality learning resources and/or more child parent interaction?

Relevant data would be collected as part of the evaluation so that matching reference numbers can be provided for participating children to enable the long-term tracking of the EasyPeasy intervention through the National Pupil Database and where available, the Early Years Foundation Stage Profile (EYFSP).

### **SAMPLE SIZE CALCULATIONS**

We make the following assumptions for sample size estimate: an intra cluster correlation of 0.106 and 10 children per nursery whose parents have provided consent with a pre- and post-test correlation of 0.68. Based on 102 nurseries (approx. 1010 children; 505 children per arm), we would have 80% power to show a difference of 0.18 of an effect size between the control and intervention groups. At the piloting stage (conducted by Oxford University and funded by The Sutton Trust), the positive effect sizes of parents' self-efficacy regarding discipline and boundaries and child cognitive self-regulation were 0.51 and 0.44, respectively. We expect the effect size to be reduced for this study in line with Slavin and Smith (2009) who find that scaling to a larger sample is associated with two or three times smaller observed effect sizes.

To ensure that the trial remains sufficiently powered whilst considering a moderate level of setting-level attrition (which we estimate to be around 15% from our previous research in the early years) we will aim to recruit 120 settings to take part in the trial (60 settings in each arm) and aim to assess gain parental consent for 13 children in each school to participate in assessment measures.

### **ANALYSIS PLAN**

A detailed SAP will be produced and submitted to EEF 3 months after randomisation.

Analyses will be conducted on an intention-to-treat basis, using two-sided significance at the 5% level. Baseline data would be summarised by treatment group and presented descriptively. CACE analyses will be conducted. Effect sizes based on the difference between the groups at the post-test would be presented as Hedges'  $g$  with 95% confidence intervals. The intra-cluster correlation coefficient (ICC) at the post-test would be presented.

Subgroup analyses will consider children that are eligible for the Early Years Pupil Premium, where English is an Additional Language (EAL) and gender will be considered and detailed in the SAP.



## IMPLEMENTATION AND PROCESS EVALUATION METHODS

### RESEARCH QUESTIONS

1. How is the intervention being disseminated to parents through settings and is the method effective?
2. Can all parents access and engage with the EasyPeasy intervention? e.g. from all socio-economic backgrounds, in EAL families, in families with SEND children.
3. To what extent are the settings and parents engaging with and delivering the intervention?
4. Is fidelity to the intervention being maintained?
  - a. Are nominated staff engaging with the app and using it as mechanism to foster communication and engagement between parents.
  - b. Are parents engaging with the app and implementing the suggested activities within the home?
5. What are the different stakeholder viewpoints on the intervention?
  - a. Setting practitioners
  - b. Parents
6. How effective and appropriately pitched are the activities:
  - a. For parents to deliver
  - b. For children to receive
7. What are the key success factors required for the EasyPeasy intervention to work well?
8. What are the barriers to successful delivery of the intervention?
  - a. For parents
  - b. For setting practitioners
9. What areas of the programme could be further developed following completion of the project?
10. What is the acceptability of the intervention and does this differ depending on the qualifications and socio-economic status of the parents involved?

### DESIGN SUMMARY

The process evaluation will take place over the full five-month duration of programme delivery and will monitor implementation fidelity, the processes involved for schools in implementing the intervention, and the perceptions of relevant stakeholders. Process evaluation activity will be mapped to Humphrey's (2016a, 2016b) eight dimensions, ensuring appropriate coverage of each dimension. Data automatically collected through each setting's weekly pod report will be used to track implementation fidelity and aspects of parental engagement (described further below). A practitioner survey at the end of the year will also allow the collection of quantitative implementation fidelity data.

To investigate the processes involved in implementing the intervention we will also conduct a multiple case study design with both longitudinal and cross-sectional aspects. For two settings we will closely follow the processes involved in implementing the EasyPeasy intervention and how changes in practice occur over the course of the intervention through visits at two time-points during the year. Four additional settings will be involved in the cross-sectional aspects with one visit to each setting to elicit observation data and perceptions of stakeholders at set times allowing comparisons to be made between settings at specific time points.

All schools will be requested to complete a 'usual practice' survey pre-randomisation and post-intervention to build up a picture of current provision of parental engagement and school readiness activities, including any associated financial costs

### MONITORING PROGRAMME FIDELITY AND COMPLIANCE

As part of the EasyPeasy programme each setting's Pod Leader receives a weekly report relating to parent engagement. This will assist in providing an insight into parental engagement/compliance. The weekly report includes the following relevant data:

- The total number of 'play dates' within a pod that week. One 'play date' is defined as a parent visiting the app and conducting one or more of the following behaviours: accessing the app, watching a video(s) or making a comment(s) within the Pod. Parents are not identified in 'play date' reports.
- The total number of 'play dates' made in a pod since the programme began.
- The number of games and text messages that have been sent to all parents within the pod that week.

In the context of this trial, it is important to note that Pods may contain parents who are using EasyPeasy but whose nursery children did not fit the eligibility criteria for the trial or have not consented to their child to be part of the evaluation. With this in mind, weekly Pod data can be used as a proxy for parental engagement at setting level.

Parents have the option to stop receiving text messages from EasyPeasy. The EasyPeasy team record this drop-out data and will share this with the evaluation team. Jelley *et al.* (2016) reported that 3% of parents chose to opt-out of receiving intervention SMS during the EasyPeasy pilot study. Drop-out data can also be used to give an insight into parental compliance/engagement with the programme. 'Acceptable' levels of drop-out will be defined prior to programme implementation and will be included in a protocol amendment.

Pod Leader engagement and compliance at a setting level will be informed by data which is collected by the EasyPeasy team, including attendance at compulsory training (webinar). Pod leader engagement will be defined prior to programme implementation and will be included in a protocol amendment.

### SCHOOL CASE STUDIES

Ten percent of schools ( $n=6$ ) in the intervention group will be randomly selected to participate in case studies. These will involve:

**Longitudinal case studies:** Two schools will be requested to participate in a telephone interview at the beginning of the intervention and an in-school face-to-face interview with a member of the research team at the end of the trial.

**Cross-sectional case studies:** Two schools will be requested to participate in an in-school face-to-face interview with a member of the research team mid-way through the programme.

These four settings will be chosen at random at the beginning of the trial, and will be replaced (at random) if drop-out occurs.

**‘Best Practice’ case studies:** Towards the end of the project, a further two settings where the intervention is perceived as being successful (high parental engagement via tracking app usage) both in delivery and impact, will be selected to participate in these ‘best practice’ case study visits. These ‘best practice’ settings will be chosen from settings with a higher than average pod engagement determined through the average number of weekly playdates.

During the case studies, the evaluation team will request to interview Pod Leader. The Pod Leader interviews will provide an understanding of how nurseries deliver and monitor the intervention, any barriers, strategies for keeping parents engaged and to gauge potential impact, if any, of an improved home learning environment via EasyPeasy on children’s learning within the nursery. Understanding the Pod Leaders use of the weekly report will also be covered during these interviews. Weekly Pod report data includes:

- The number of parents who have visited the pod at least once within the week.
- The three parents who are the most active within the pod are named.
- The three parents who visited the least within the pod are named.
- The comments made by parents within the pod that week.

The interview provides an opportunity to gauge how, if at all, Pod Leader encourage the parents who are named as being inactive to re-engage, and acknowledge, if at all, parents who are named as being very active; improve pod engagement, if applicable.

During visits to case study schools, the evaluation team will also conduct a focus group with parents who engaged (at any level) with the EasyPeasy intervention (discussed further below). The parent focus groups will take place at both the cross-sectional and end-point settings visits, and at the final visit of the in-depth case study settings.

The parental focus groups will include 5-8 parents who signed up to the EasyPeasy intervention. The focus groups will explore the acceptability and delivery of EasyPeasy and how it was used and adapted in individual circumstances, including any barriers that may have been faced. The focus groups will also explore if the programme has had an impact on parents’ understanding of child development and parents’ attitudes and engagement with their child and their child’s learning. The focus group will also seek to gauge any changes to the level of parent-nursery interactions as a result of implementing the EasyPeasy programme. Focus groups will last approximately 30-40 minutes, and will take place in the setting at a time to be determined, most convenient to the parents and the school. Consent will be gained for participation. Each parent will receive a £15 Love2Shop voucher for taking part.

**Table 4: Summary of school case study visits**

Type of case study	Intervention period		
	Beginning	Mid-way	End
<b>Longitudinal (n=2)</b>	Telephone interview	-	Face-to-face interview with Pod Leader; Focus group with parents
<b>Cross-sectional (n=2)</b>	-	Face-to-face interview with Pod Leader; Focus group with parents	-
<b>Best practice (n=2)</b>	-	-	Face-to-face interview with Pod Leader; Focus group with parents

### FEEDBACK SURVEY OF TEACHING STAFF

All Pod Leaders will be requested to complete an online survey developed by the evaluation team at the end of the intervention to capture resource usefulness and acceptability, intervention delivery and perceived impact of EasyPeasy. This, in addition to the interviews and focus groups, will provide information in relation to relevant research questions, covering the dimensions of, and factors affecting implementation, as outlined in the EEF guidance<sup>1</sup>. Details on the costs to schools (e.g. monetary, staff time) associated with implementing EasyPeasy will also be captured here.

### INTERVIEW WITH DEVELOPERS

An interview with the developers will be conducted at the end of the programme to discuss further development of/changes to the programme, perceived impact, implementation fidelity including actual barriers, future plans, including information on costs to be included in the cost evaluation in line with recent guidance from the EEF.

### ECONOMIC EVALUATION

Data on intervention costs will be collected from EasyPeasy as well as from schools participating in the case studies, through interviews as part of the process evaluation, and will be used to conduct a cost evaluation in line with recent guidance from the EEF.

### ETHICS AND REGISTRATION

Ethical approval for the evaluation has been received from Durham University's School of Education Ethics Committee on 31/08/2017 and from University of York Health Sciences Committee on 01/09/2017.

<sup>1</sup>[https://educationendowmentfoundation.org.uk/public/files/Evaluation/Setting\\_up\\_an\\_Evaluation/IPE\\_Guidance\\_Final.pdf](https://educationendowmentfoundation.org.uk/public/files/Evaluation/Setting_up_an_Evaluation/IPE_Guidance_Final.pdf)

Opt-in consent will be sought from each school to take part in the overall trial. Their continued participation in the intervention is dependent upon their consent to participate in the evaluation and subsequent data sharing with the EEF. Opt-in consent will be sought from relevant school staff for observations, interviews and surveys as part of the process evaluation. Opt-in consent will be sought from relevant parents for relevant child assessments, home visits, focus group interviews and surveys as part of the process evaluation.

The Evaluation Team will register the trial with ISRCTN ([www.controlled-trials.com](http://www.controlled-trials.com)) once the protocol is agreed.

## **PERSONNEL**

This independent evaluation is been led team of researchers from Durham University's in collaboration with University of York, York Trials Unit and includes:

**Dr Lyn Robinson**, an experienced Research Associate at Durham University with experience of leading and delivering large trials, including those funded by the EEF (Literacy Octopus, Maths Champions Evaluation, Teen Sleep). Her expertise and interest lies in conducting research in early years settings to improve attainment for disadvantaged children, and developing and delivering continuing professional development (CPD) training (Literacy Octopus) for learning and assessment (Maths Champions). Her strengths include developing creative methods of recruitment, retention and data collection within trials, particularly when working within the early years in disadvantaged settings (Robinson & Ball 2013, Robinson 2016). She will be Principal Investigator of this evaluation. She will oversee the development of the impact, process and cost evaluation elements, contributing expertise to the design and conduct of this evaluation as well as lead on the writing of progress/final report. She will undertake all trial management leadership responsibilities. Lyn will be on maternity leave from 7<sup>th</sup> October 2017 returning to the office on 1<sup>st</sup> October 2018. During this time, Principle Investigator and leadership responsibilities will be transferred to Victoria Menzies, Prof Christine Merrell and Dr Helen Cramman

**Victoria Menzies**, an experienced education trial coordinator and researcher at Durham University with experience of running large trials in nurseries (Maths Champions), primary (Shared Maths Project, Hallé SHINE on Manchester, Peer Tutoring in Maths in Scotland) and secondary schools (Project Based Learning, ICCAMS 2 Project, SHINE in Secondaries). As trial coordinator on a number of projects, she is aware of the many challenges involved in doing randomised controlled trials (RCTs) in education and has developed a bank of methods and possible solutions to deal with these. Her research interests lie in randomised controlled trial methodology including piloting and reporting, and in the development of maths and literacy skills; previous research projects have included studies of early number development in Scotland and the effect of phonological awareness and training on children's early reading skills. She has also developed and delivered educational interventions in both primary and secondary schools as part of trials. Victoria will be co-investigator of this evaluation, contributing expertise to the design and conduct of the evaluation and the process evaluation and will lead on writing all progress reports and the final report.

**Professor Christine Merrell** has published extensively in the area of young children's development and has many years of experience in developing assessments for use with children in the early years and primary school. Christine's experience and expertise will be

valuable in informing the process evaluation and interpreting the findings from both the process evaluation and the outcome measures. Dr Helen Cramman is an experienced project manager and is Research Contract Manager at the School of Education at Durham University. Helen has over 14 years experience managing projects of varying scale and complexity in industry and academia. Before joining the research team at the Centre for Evaluation and Monitoring, Helen trained primary school teachers, senior leaders and local authority representatives in the effective use of assessment data and has supported and advised multiple EEF evaluations in their use of assessments for pre and post testing. Helen has published in the area of early literacy and numeracy.

She will be responsible for overseeing high level management of the trial including the delegation of tasks to the Research Associate and research administrator. Helen will maintain budgetary control and contribute towards writing progress reports and the final report.

**Dr Susan Stothard**, a Chartered Psychologist and an Associate Fellow of the British Psychological Society. Sue's combination of practical experience (conducting educational assessments of young children), research expertise (investigating the factors that impact cognitive development), and applied experience (writing educational assessments for nursery and primary school children) will be valuable in informing the pre-test and outcome measures, and interpreting the findings.

**Professor Carole Torgerson**, an educational trials design and methods expert and an educationalist from Durham University. She has undertaken over 25 systematic reviews of randomised controlled trials and has been lead or co-investigator on around 15 trials evaluating a variety of education and health education interventions. Carole will be a co-investigator of this evaluation, contributing expertise to the design and conduct, as well as to the writing of the final report.

**Caroline Fairhurst (York Trials Unit, University of York)**

Caroline Fairhurst is a statistician, currently supporting a number of trials within the York Trials Unit. She will be a co-investigator of this evaluation contributing to the design and conduct of the trial, development of the SAP and undertaking the statistical analysis.

**Dr Linda (Yuqian) Wang**, a Research Associate at Durham University. Linda has worked with local schools, Education Durham and Further Maths Support Programme (FMSP) for the PANDA project to pioneer in-service teachers' professional development in the North East of England to meet the new curriculum and pedagogy challenges. Linda will liaise with project leadership to deliver the trial on a day-to-day basis, contribute towards the process and cost evaluation and contribute towards writing the SAP, progress reports and final report.

**Research Administrator (TBA)**, will facilitate the administration of assessments and liaise with settings for visits for data collection purposes. They will also assist with the collection of school destination data from parents.

## RISKS

Risk	Detail	Mitigation
1 Capacity within Durham to run trial	Proposed timeline brought forward, leading to capacity issues for Durham	EEF issued letter of intent. Durham requested faculty approval to appoint a researcher. Durham and EasyPeasy to quickly produce project protocol so that costs can be finalised and contract issued. EasyPeasy to lead on LA and school recruitment. EasyPeasy to support Durham with locating supply agencies within recruited LAs for the administration of pre-test data.
2 Intervention period may not be long enough to produce a measurable impact on the primary outcome	The project timeline has been brought forward. It was originally proposed that the intervention lasted for a full academic year. Proposed change of timeline means that intervention period is shortened to 5 months.	Retain the original timeline.  Within the 5 month period, parents will receive 27 games.
3 Recruitment of LAs and schools	1. Schools might not be interested in participating  2. Recruitment may take longer than anticipated and we miss the start-date for children beginning the intervention, thus reducing the intervention period.	1. Explore barriers to participation and offer sufficient and appropriate incentives to participate.  2. Utilise existing network connections, e.g. Schools North East, the EEF North East Literacy Campaign, and DfE Opportunity Areas. EP to call on relationship with LA to encourage school recruitment if uptake is initially slow. Stagger start dates of EasyPeasy and split post-data collection across June/July and September of the new school year.

<p>4 Recruitment of parents</p>	<p>1. Recruitment of parents to EasyPeasy via a research trial is more complicated and time consuming than the standard approach, which has been designed to minimise barriers to entry. This may lead to fewer, and different types of, parents signing up to the EasyPeasy research study.</p>	<p>1. Acknowledge these possible effects in the Interpretation of Findings. Participation rates in each nursery will be recorded to give an indication of uptake and identify potential threat to the validity of the evaluation findings. If insufficient parents agree to participate in any nursery, another nursery will be required therefore we aim to over-recruit.</p> <p>Parents have the option to use EasyPeasy without being part of the evaluation.</p> <p>Parents are made aware on information and consent forms that they can withdraw their child from the evaluation at any time, without a reason.</p> <p>Parents assured of their own and their child's anonymity and confidentiality of data via parental information sheets and consent forms.</p>
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5 Pre-test data collection	<p>1. Schools are located around England and many more trained assessors are required than originally anticipated.</p> <p>2. Schools are not responsive to dates supplied for trained assessors to go visit.</p> <p>3. The timeline is tight between recruitment, pre-testing and randomisation. Timeline very tight to conduct HOME visits post randomisation but before intervention</p> <p>4. Delay in recruitment and pre-testing will impact on training and delivery of the intervention.</p> <p>5. Selected children are absent on the day of the assessment</p> <p>6. Assessments are lost before received at Durham or loss of data from databases at Durham</p> <p>7. Parents are not at home for the HOME visit.</p>	<p>1. EasyPeasy to focus recruitment activity on clusters of schools</p> <p>2. Research team to speak to Headteacher and encourage response. EP team to utilise strong links with the school's LA to encourage responsiveness.</p> <p>3. EP and Durham teams to update progress and concerns regularly through frequent teleconferences. Recruitment of temporary research assistant(s) to complete these visits.</p> <p>4. Training delivered via webinar which offers more convenience to nursery and to speed up training process.</p> <p>5. Conduct 'mop up' visits among 10% of nurseries. Durham team to monitor and discuss with funding options with EEF should further mop-up be required.</p> <p>6. Data management plan agreed which includes back-up arrangements</p> <p>7. Contact parent day before visit to re-confirm visit. Reschedule where possible.</p>
6 Random assignment process	<p>1. Staff unavailable to carry out random assignment on the prescribed day(s).</p> <p>2. Tight timeline.</p>	<p>1. Ensure backup staff are available to do this</p> <p>2. Randomisation could be completed in batches (of schools who have completed pre-test), if necessary, to adhere as close to timeline as possible.</p>

7 Training of intervention settings	<p>1. Low uptake of webinar training which could lead to reduced uptake of intervention/ increased attrition.</p> <p>2. It is possible that school firewall systems will block Pod Leaders accessing the EasyPeasy Webinar training session.</p>	<p>1. Set dates and make nurseries aware from recruitment the dates of training. Offer multiple webinar sessions for settings to select a suitable date. Offer webinar recording for Pod Leaders to watch at a more convenient time.</p> <p>2. EasyPeasy team to make early contact with school IT leads to ensure Webinar software and EasyPeasy's online dashboard are exempted from the school's firewall.</p>
8 Delivery of the intervention	<p>The additional burden of delivering EasyPeasy as part of an evaluation may negatively affect the quantity and quality of Pod Leader's and parent's engagement</p> <p>1. Complex information and long consent forms could be off-putting for EAL/or low confidence/busy parents - many of those in EasyPeasy's target group.</p> <p>2. Time spent on research tasks may reduce time spent by Pod Leaders on standard engagement tasks encouraged by EP i.e. making and responding to Pod comments, talking to parents about EP, incorporating games into curriculum delivery, and liaising with EP team about queries and feedback.</p> <p>3. Conversation between</p>	<p>Acknowledge these possible effects in the Interpretation of Findings.</p> <p>1. Advise school staff to help with interpretation of information and consent forms to ensure fair access to the evaluation. Parent information and consent forms have contact details of the Durham research team for parents to ring and discuss any questions they have about the research.</p> <p>2. Provide high quality account management for Pod Leaders. Ensure that Pod Leaders are aware they can sign up multiple additional staff to receive EasyPeasy weekly reports, to mitigate against staff change or Pod Leaders on sick leave.</p> <p>3. Burden to schools from participating in the evaluation components of research kept 'low' due to pre- and post-testing being</p>

	<p>parents and pod leaders may become focused on research activities and logistics rather than play and EasyPeasy games</p> <p>4. Pod Leaders might leave the school. This might lead to the disruption of communication channels and might cause parents to disengage.</p>	<p>conducted by independent test administrators and not school staff.</p> <p>4. Pod leaders will be requested to provide the name of another staff member who will continue their role in case of absence/leaving school. If this situation arises, the new Pod Leader will be trained via a webinar recording.</p>
9 Retention of schools	<p>1. The additional requirements of participating in EasyPeasy as part of a complex research study may lead to school withdrawal, where otherwise those schools would have continued delivering EasyPeasy.</p> <p>2. Schools withdraw from the project at any time.</p>	<p>1. Acknowledge this possible effect in the Interpretation of Findings. Initially aim to over-recruit.</p> <p>2. Maintain regular contact with the schools to identify any barriers to participation as they emerge and monitor patterns. Communicate directly with schools to offer help to overcome the reasons.</p>

10 Retention of participants	<p>The additional requirements of participating in EasyPeasy as part of a complex research study may lead to parent withdrawal, where otherwise those parents would have continued engaging with EasyPeasy.</p>	<p>Acknowledge this possible effect in the Interpretation of Findings</p> <p>Keep parental research requirements to a minimum. The number of parents required for focus group participation is minimal. Participation in focus groups is optional and incentives are provided.</p> <p>Support Pod Leaders to engage with, establish relationships and motivate parents.</p> <p>Make full use of analytics data, and EasyPeasy's customer care feature, 'Intercom' to identify technical problems and troubleshoot. Continue iterating on EasyPeasy features to maximise engagement and deliver a high quality user experience for parents.</p>
12 Post-test data collection	<p>1. Schools lose interest in the trial and don't grant permission for post-testing</p> <p>2. Selected children are absent on the day of the assessment. Parents are not at home for the home visit.</p> <p>3. Assessments are lost before received at Durham or loss of data from databases at Durham.</p>	<p>1. Wait list incentive which will be withheld if post-testing does not happen. Feed-back test scores to schools about their pupils' progress and development.</p> <p>2. Build in a mop-up contingency for extra visits to counteract absenteeism.</p> <p>3. Data management plan agreed which includes back-up arrangements</p>
13 Analysis of data	<p>Durham staff unable to analyse data, e.g. long-term illness or loss of key staff</p>	<p>Durham will discuss possible extension to delivery date with EEF. Durham will seek support from Faculty.</p>

14. Interpretation of findings	<p>1. It is possible that parents/schools in the control group will have used EasyPeasy and this might impact the findings</p> <p>2. It is possible that individual parents will download EasyPeasy on iOS, which is now freely available on the AppStore.</p> <p>3. The level of involvement of Pod Leaders could vary between settings and impact results</p>	<p>1. A wait-list incentive strategy is adopted to ensure that the 2017-18 control group of 3+ year old children do not ever receive the intervention.</p> <p>2. EasyPeasy can ensure there is no cross-over at a school level.</p> <p>3. This is likely to be reflected in weekly pod updates that reflect parental engagement and can be considered in the CACE analyses.</p>
15 Production of final report	Durham staff unable to produce report, e.g. long-term illness or loss of key staff.	Durham will discuss possible extension to delivery date with EEF. Durham will aim to assign other staff to the project.

## **TIMELINE**

Date	Activity	Responsibility
<b>01/06/2017 – 31/08/2017</b>	Project set-up meetings, contracts signed, protocol development, ethics and data protection	Evaluation team and EasyPeasy
	<u>Recruitment of Local Authorities</u>	EasyPeasy
<b>01/09/2017- 30/09/2017</b>	Trial registration with ISRCTN	Evaluation team
<b>31/08/2017 - 31/10/2017</b>	Recruitment events to facilitate recruitment of schools	Led by EasyPeasy, supported by the Evaluation team
	120 settings recruited with MoUs signed	Led by EasyPeasy, supported by the Evaluation team
	Collection of parental consent per nursery	Led by Evaluation team,

	<p>class (minimum 13 per nursery)</p> <p>Supply teacher recruitment through relevant agencies and training to conduct pre-randomisation tests</p>	<p>supported by EasyPeasy</p> <p>Led by Evaluation team, supported by EasyPeasy</p>
<b>15/10/2017 - 08/12/2017</b>	<p>Pre-intervention data collection in schools by test administrators (CELF), teachers (CBSQ).</p> <p>Quality assurance of test administrators</p> <p>Arrange mop-up revisits, up to 10% of schools should children have been absent at pre-testing phase</p> <p>Completion of usual practice survey by all settings</p>	<p>Led by Evaluation team, EasyPeasy to support logistics</p> <p>Evaluation team</p> <p>Evaluation team</p> <p>Evaluation team</p>
<b>11/12/2017 - 15/12/2017</b>	Randomisation and settings informed of allocation	Evaluation team
<b>31/12/2017</b>	Detailed statistical analysis plan produced and submitted to EEF	Evaluation team
<b>11/12/2017 - 31/01/2018</b>	50 HOME visits (25 control group and 25 intervention group) conducted post randomisation and pre-intervention.	Evaluation team
<b>04/01/2018 - 12/01/2018</b>	Pod Leader training	EasyPeasy
<b>13/01/2018 - 01/06/2018</b>	Intervention (20-weeks)	EasyPeasy
<b>15/01/2018 – 15/02/2018</b>	Case Study - Two schools in intervention group to participate in a telephone interview	Evaluation team
<b>15/03/2018 – 15/06/2018</b>	<p>Case Study - Two schools in intervention group will participate in an in-school face-face interview mid-way through the programme.</p> <p>Case Study - Towards the end of the project, a further two schools in intervention group will participate in a case study (Interview with Pod Leaders/focus groups with parents)</p> <p>Supply teacher recruitment through relevant agencies and training to conduct post-intervention tests</p>	<p>Evaluation team</p> <p>Evaluation team</p> <p>Evaluation team</p>

<b>04/06/2018 - 17/07/2018</b>	<p>Post-intervention data collection in schools by test administrators (CELF), teachers (CBSQ).</p> <p>Case Study - Two schools in intervention group will participate in a face-to-face interview at the end of the trial</p> <p>50 HOME visits (25 control group and 25 intervention group)</p>	<p>Evaluation team</p> <p>Evaluation team</p> <p>Evaluation team</p>
<b>01/08/2018 – 31/08/2018</b>	Interview with the developers	Evaluation team
<b>01/09/2018 – 01/11/2018</b>	Collection of children's school destination data	Evaluation team
<b>15/07/2018 - 31/12/2018</b>	Collate data, analysis and report writing	Evaluation team
<b>31/10/2018</b>	Final report	Evaluation team
<b>31/01/2019</b>	EYFSP report	Evaluation team

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## Appendix 1: Theory of Change developed by EasyPeasy team prior to the EEF evaluation.

Problem: what are families struggling with?	Reason: Why is this the case?	Design feature: How does EasyPeasy help to relieve this problem or change behaviour?	Short term outcomes	Medium term outcomes	Long term outcomes
Parent and child do not play together frequently	<ul style="list-style-type: none"> <li>Run out of ideas for play</li> <li>Time poor</li> </ul>	<ul style="list-style-type: none"> <li>SMS prompts: EasyPeasy uses behavioural theory to build habits of play. It takes 21 days to build a habit. Regular texts in the first 3 weeks of the programme seed a habit of play, and then text frequency reduces in stages.</li> <li>Games: EasyPeasy shares a new game with parents each week; with bonus games during school holiday periods. All games are modelled by real families in short video clips to make it easy and fun to consume content.</li> </ul>	<ul style="list-style-type: none"> <li>Parent and child play high quality, developmental games with each other regularly</li> </ul>	<ul style="list-style-type: none"> <li>Child's confidence increases as parents and child have more fun together</li> <li>play becomes habitual and self-sustaining</li> </ul>	<ul style="list-style-type: none"> <li>Increases in school readiness</li> </ul>
Parent shows poor consistency in expectations and rule enforcement	<ul style="list-style-type: none"> <li>Difficulty controlling children</li> <li>Loud/crowded home environment wears away at parent's resolve and emotional resources</li> </ul>	<ul style="list-style-type: none"> <li>Games: games are designed with the parent setting a challenge, rule or shared expectation. Practice, repetition, encouragement and celebration support the learning process.</li> <li>A strong evidence base links parental 'consistency' with good early development of 'delay of gratification', 'executive functioning' and 'emotional regulation'</li> </ul>	<ul style="list-style-type: none"> <li>Parent sets clear expectations for child when playing EasyPeasy games</li> <li>Child receives positive encouragement from parent during play</li> <li>Parent &amp; child celebrate successes together</li> </ul>	<ul style="list-style-type: none"> <li>Parent gets used to setting expectations and sticking to them, from game scenarios</li> <li>Parent becomes more consistent with boundaries and routines at home, beyond EasyPeasy game play</li> <li>Child's ability to self-regulate increases</li> </ul>	
Parent has low confidence	<ul style="list-style-type: none"> <li>High levels of stress</li> <li>Low access to high quality information on child development</li> </ul>	<ul style="list-style-type: none"> <li>'Did You Know' facts: Facts ensure that parents understand the link between play and development.</li> <li>EasyPeasy Pods: Parents can comment on games within their 'Pods'</li> <li>Practitioners managing 'Pods' can also comment, monitor interactions, and view levels of parent engagement</li> </ul>	<ul style="list-style-type: none"> <li>Parents develop conscious understanding of how play supports learning and development</li> <li>practitioners develop understanding of which parents are engaged and which parents need additional support</li> </ul>	<ul style="list-style-type: none"> <li>Parent confidence increase through increasing knowledge and feeling more connected to other parents in their area</li> </ul>	
Parent is isolated and has poor social network	<ul style="list-style-type: none"> <li>Cost of travelling out of the house</li> <li>English as second language</li> <li>Social anxiety/low confidence</li> </ul>	<ul style="list-style-type: none"> <li>EasyPeasy Pods: This online commenting system links parents together, increases peer-to-peer learning and support</li> <li>Research shows that connecting parents together boosts confidence</li> </ul>	<ul style="list-style-type: none"> <li>Parents comment - and read comments of others - on EasyPeasy games &amp; share ideas for adaptation to each other</li> </ul>	<ul style="list-style-type: none"> <li>Parents develop new peer-to-peer relationships</li> <li>Practitioners are more effective in reaching out to disengaged parents, pulling them into activity and events at the school/nursery</li> </ul>	
Low levels of warmth in parent-child interactions	<ul style="list-style-type: none"> <li>Parent using more negative than positive reinforcements</li> <li>Few opportunities for positive interactions</li> </ul>	<ul style="list-style-type: none"> <li>Games: Film clips are carefully directed to ensure that parents are modelling positive parenting techniques, and providing warmth and encouragement when the child is struggling or frustrated; games always end w/ celebration</li> </ul>	<ul style="list-style-type: none"> <li>Parents are more encouraging and supportive of their children whilst playing EasyPeasy games through copying the positive interactions modelled in the film clips</li> </ul>	<ul style="list-style-type: none"> <li>Parent becomes more positive and encouraging, beyond EasyPeasy game play</li> <li>Child's determination and confidence improve through receiving more warmth and positive reinforcement from their parent</li> </ul>	

## OUR THEORY OF CHANGE



### Footnotes

1. Uri Bronfenbrenner's The Ecology of Human Development
2. Diana Baumrind's parenting style framework
3. Professor James Heckman The Value of Early Childhood Education
4. MH Bornstein et al. 'Competence and satisfaction in parenting young children.' Bowen, Bowen and Cook, 'Neighborhood characteristics and supportive parenting'
5. Elder & Caspi's Family Stress Model 38, Kiernan and Huerta, 'Economic deprivation, maternal depression, parenting and children's cognitive and emotional development in early childhood'
6. 41 less time and attention from rich parents
7. Waldfogel and Washbrook (2010), Low income and early cognitive development in the UK

## Appendix 2: Memorandum of Understanding for Schools



### EASYPEASY NATIONAL TRIAL: INFORMATION FOR SCHOOLS

In partnership with:



Durham  
University



UNIVERSITY  
of York



Education  
Endowment  
Foundation

#### Summary

A research grant from the Education Endowment Foundation (EEF) has enabled 120 schools/settings from a small number of local authorities across England to have access to EasyPeasy, an app designed to improve school readiness. The support from EEF includes a robust evaluation of the impact of the app on children and their parents/guardians conducted by a research team at Durham University and the University of York. EasyPeasy has entered into strategic partnerships with a handful of authorities to identify and engage eligible schools. There are a number of responsibilities for each school that participates in the study, which are set out below. The offer to the school/setting from EasyPeasy and the benefits of joining the trial are also explained.

#### What is EasyPeasy?

EasyPeasy is a smartphone app for parents/guardians of preschool aged children. It is designed to improve early child development through increasing positive parent-child interactions and learning at home. The app sends regular game ideas to parents/guardians that they can play with their children, combined with information on child development. The design of the app applies behavioural insights to help seed positive habits of play and interaction at home by sending tailored prompts, encouragement, and reminders to parents/guardians.

EasyPeasy integrates with your early years setting to function as a digital outreach service that extends your reach and impact. A desktop version allows teachers and practitioners to share and communicate with parents/guardians, as well as capture information on parent engagement from a computer at school. When used in schools, parents/guardians are typically organised into small groups or 'Pods' on the app, providing a virtual support network where they can comment on the games, and the challenges and successes of using them to engage their children. Each 'Pod' is overseen by a Pod Leader, a practitioner from your school who is familiar with parents/guardians and children in your school, and who will monitor parents/guardians' progress and offer remote support.

Previous research from the University of Oxford (funded by the Sutton Trust) has shown that EasyPeasy positively impacts children's cognitive self-regulation, attention and self-control.

#### Who is the team behind EasyPeasy?

The EasyPeasy team is a group of service designers, educators, programmers, and researchers based in Hoxton, East London, who are passionate about using technology to create a better, fairer world. You can learn more about EasyPeasy at [www.easypeasyapp.com](http://www.easypeasyapp.com)



### What is the purpose of this evaluation?

The Education Endowment Foundation has appointed a team of researchers led by Dr Lyn Robinson-Smith from Durham University and University of York to conduct a research trial. The research team are interested in finding out how EasyPeasy may impact on children's early language, communication, socio-emotional development and behaviour can be evaluated, as well as on parents/guardians' engagement with their children's development. The research trial will build on promising, existing evidence of EasyPeasy's positive impact on children's cognitive self-regulation, attention and self-control. The results of this research will make an important contribution to the evidence base on early intervention and social mobility.

### How will EasyPeasy be evaluated?

The EasyPeasy research trial has been designed to be a 'Randomised Controlled Trial'. This means that half the schools taking part will be chosen at random to receive EasyPeasy in January 2018 (the Intervention Group), with the other half waiting to receive EasyPeasy in September 2018 (the Control Group). Once EasyPeasy has been delivered to Intervention Group families, outcomes from parents/guardians and children in the Intervention Group will be compared to those in the Control Groups to allow researchers to see if EasyPeasy has made a measurable difference. The research team will do this by visiting your school to assess children's language and communication skills, and also ask the child's teacher/practitioner to complete a short questionnaire (<5mins) on their social-emotional development and behaviour. Children will be assessed regardless of whether the school is allocated to the intervention or control group. The random allocation of schools to intervention and control group is essential as it is the best and most rigorous form of evaluation.

### Why is my school being invited to take part?

Your school has been invited to take part in this research project because your Local Authority is working in partnership with EasyPeasy, and because your school fits the eligibility criteria for participation (your school is in an area of relative disadvantage). If you decide to take part, your Local Authority will be told whether your school is chosen at random to be in the intervention or control group.

### Is there a cost to us for taking part in the research project?

No! The full cost of taking part is covered by your Local Authority and the Education Endowment Foundation (the independent funders of this research project).

### What would your parents/guardians receive?

Parents/guardians receive EasyPeasy communications via text message (SMS). An initial SMS invites them to join EasyPeasy through a personalised message addressed from your school, and includes a link to 'get started'. When the parent/guardian clicks on the link, they are taken to a personal dashboard that presents them with an initial bank of games to explore. Each game is presented through a short video clip, and a short set of written instructions. Parents/guardians will then receive a series of SMS reminders throughout the intervening 20 weeks, which provide them with new games (weekly), information on child development, and encouragement to play as a family. The design of EasyPeasy is such that the frequency of SMS reminders reduces over the course of the programme, as positive habits of play and interaction begin to set in at home.

### What does taking part in the research project involve?

120 state primary schools that have provision to teach children aged 3+ will take part in this research project during the 2017/18 academic year. You will be required to provide information about your school, parents/guardians, pupils and teachers/practitioners at different time points throughout 2017/18 only. The timetable below details the information required and when.





### What would happen to your information and parents/guardians' and children's information?

Data will be used for research purposes only and will be collected to evaluate EasyPeasy. All the data collected during the research trial will be stored securely, treated confidentially, shared only between the research teams at Durham University, University of York, EasyPeasy and EEF. We will not use the names of people or schools in any reports arising from this research. Everyone who has access to the study data is responsible for handling study data in accordance with applicable Data Protection law(s) and has undergone relevant data protection training. Durham University and the University of York will store the data for up to five years after the end of the trial, to allow time for it to be properly analysed, published and reviewed. After this period it will be destroyed. Durham University's data storing policies can be read here: [www.dur.ac.uk/research.innovation/governance/policy/rdm/](http://www.dur.ac.uk/research.innovation/governance/policy/rdm/) and University of York's here: <https://www.york.ac.uk/about/departments/support-and-admin/information-services/information-policy/index/research-data-management-policy/>

None of the information we collect will affect children's place at their nursery/school. All research staff who enter the school as part of this research project will have Disclosure and Barring Service clearance. Named data will be matched with the National Pupil Database and shared between the research team, the Department for Education, EEF, EEF's data contractor FFT Education, and in an anonymised form for other research purposes. Information collected will not affect children's place at their school.

### Who approved the research trial?

This research trial received ethics clearance through Durham University's School of Education Ethics Committee on 31st August 2017 and University of York's Health Sciences Education Committee on 1st September 2017. If you have any ethical concerns about this project, you can contact the Durham committee via email: [ed.ethics@durham.ac.uk](mailto:ed.ethics@durham.ac.uk).

### Who do I contact for further information?

Any questions or queries relating to EasyPeasy can be directed to the Project Manager on: [nicola@easypeasyapp.com](mailto:nicola@easypeasyapp.com) or Tel: 01978 896 362 (extension 2), or relating to the research trial can be directed to Linda Wang at Durham University on: [easypeasyevaluation@cem.dur.ac.uk](mailto:easypeasyevaluation@cem.dur.ac.uk) or Tel: 0191 334 4367.

### Sounds good...?

If you would like to take part in the EasyPeasy research trial, please read and complete the 'Memorandum of Understanding' attached to this form, scan (or just take a good quality photo of it on your mobile phone!) and email it back to [nicola@easypeasyapp.com](mailto:nicola@easypeasyapp.com). By completing this form you are agreeing to all aspects of taking part in the project. Participation in the EasyPeasy research trial is voluntary; you should choose whether you would wish your school to take part. If you sign up and you change your mind you can withdraw at any time, without giving a reason, by telling a member of the research team. If your school decides to withdraw, we will use the data we have collected to date as part of the research trial, unless you ask us not to.



## EASYPEASY NATIONAL TRIAL: PROJECT TIMELINE

<b>SEPTEMBER 2017</b>	<p><b>Sign your school up to take part</b></p> <p>You complete and return the Memorandum of Understanding form and nominate a teacher/practitioner to be your school's EasyPeasy Pod Leader</p> <p>We will ask you to:</p> <ul style="list-style-type: none"> <li>- Provide information on the number of eligible children (those moving to reception class in 2018/19) in your nursery</li> <li>- Complete a short survey to help us understand what usual practice is within your setting</li> </ul>
<b>SEPTEMBER - OCTOBER 2017</b>	<p><b>Work together to recruit parents/guardians to the study</b></p> <p>The research team will provide you with materials and information to help you recruit and gain consent from parents/guardians for them to take part and their children to be assessed. You will need to recruit at least 13 parents/guardians of children who are starting school (reception) in September 2018 to take part in the study. Although other parents / guardians in nursery and reception classes can join EasyPeasy if they wish, without signing the consent form and without participating in the research trial and we encourage this! Consent forms are to be returned to the research team based at Durham University.</p>
<b>OCTOBER - DECEMBER 2017</b>	<p><b>Researchers will collect pre-test information</b></p> <p>Research assistants will arrange to visit your school to assess language and communication ability of participating children (~20 minutes per child). We'll need you to provide information of when each child usually attends the nursery so that we can arrange the best time to visit. The research team based at Durham University can provide your school with each child's assessment results, if you wish. A member of the research team will also visit the homes of a smaller sample of parents/guardians during this time. We will ask a relevant practitioner/teacher to report on children's self-regulation by completing a survey, which will take around 5 minutes to complete.</p>
<b>DECEMBER 2017</b>	<p><b>You will find out when your school will receive EasyPeasy</b></p> <p>At this point, you will be notified if your school will start EasyPeasy in January 2018 (Intervention Group) or in September 2018 (Control Group)</p>
<b>JANUARY 2018</b>	<p><b>EasyPeasy will deliver Pod Leader training via webinar</b></p> <p>If you've been selected to receive EasyPeasy in January 2018, your Pod Leader will participate in a two-hour online training session to get familiar with EasyPeasy and how to use it to your school's advantage. Training will take place during the first couple of weeks in January.</p>



<b>JANUARY - JUNE 2018</b>	<p><b>The EasyPeasy programme will begin</b></p> <p>If you are in the intervention group you will start the EasyPeasy programme now!</p> <p>If you are in the Control Group, you will continue with your usual practice until you start EasyPeasy in September 2018.</p> <p>Throughout the next 5 months a member of the research team may wish to visit your school to talk to teachers/practitioners and also a group of parents/guardians. We will of course let you know if we would like to visit your school and give you further information. We would appreciate your support with these visits, and we'll make sure they are at a time most convenient to you.</p>
<b>JUNE – JULY 2018</b>	<p><b>Researchers will collect post-intervention data</b></p> <p>Research assistants will return to your school to collect information about language and communication from the same children who were assessed in October-December 2017. This will happen regardless of whether your school received EasyPeasy in January 2018 or are due to receive it in September 2018.</p> <p>A relevant practitioner/teacher will be asked to report on children's behaviour and self-regulation.</p> <p>If you have been running EasyPeasy since January 2018, we would like certain staff members to complete a short survey. These will be posted for you to complete.</p>
<b>SEPTEMBER 2018</b>	<p><b>Long-term follow up begins, and Comparison Group schools start EasyPeasy</b></p> <p>You will be asked to provide school destination information for each child who participated in the assessments.</p> <p>If you were allocated to receive EasyPeasy app in September 2018, the EasyPeasy team will provide you with training dates and all the information and support you need to get started!</p>

## EasyPeasy National Trial: Registration

In partnership with:



- I confirm that I have read and understood the EasyPeasy information sheet and have had the opportunity to ask questions.
- I understand that by agreeing to take part in this project my school will be randomly assigned in December 2017 to either (1) receive the EasyPeasy app in January 2018 or (2) September 2018, and agree to take part in either case
- I understand that all child and practitioner data will be kept confidential and that no material which could identify the school or individual children or practitioners will be used in any reports of this evaluation.
- I consent to the school taking part in the above research trial.
- I have nominated a staff member as EasyPeasy 'Pod Leader' who will support all of the following aspects of the research trial:
  - Providing information to parents/guardians (provided by the research team) about the research trial and encourage them to take part
  - Gathering consent from at least 13 parents/guardians (by October 31st) for them and their child to take part in the relevant data collection and assessments
  - Facilitating visits to the school by a research assistant to collect necessary information in October-December 2017 and again in June-July 2018
  - Participating in a two-hour online EasyPeasy training session in January 2018 (if applicable)
  - Completing a survey on child self-regulation in October-November 2017 and again in June-July 2018 and return this to the research team
  - Facilitating selected staff members to complete two short surveys and return to the research team
  - Providing school destination data to the research team in September 2018 for pupils whose parents/guardians have provided consent

*I understand that in return for supporting these research activities, it is free for my school to use EasyPeasy.*

Head Teacher name:

School name:

Head telephone number:

Name of nominated 'Pod Leader':

Head Teacher signature:

Pod Leader email address:

Date:

Pod Leader telephone number:



## EasyPeasy National Trial: Information for Schools

### Summary

A research grant from the Education Endowment Foundation (EEF) has enabled 120 schools/settings from a small number of local authorities across England to have access to EasyPeasy, an app designed to improve school readiness. The support from EEF includes a robust evaluation of the impact of the app on children and their parents/guardians conducted by a research team at Durham University and the University of York. EasyPeasy has entered into strategic partnerships with a handful of authorities to identify and engage eligible schools. There are a number of responsibilities for each school that participates in the study, which are set out below. The offer to the school/setting from EasyPeasy and the benefits of joining the trial are also explained.

### What is EasyPeasy?

EasyPeasy is a smartphone app for parents/guardians of preschool aged children. It is designed to improve early child development through increasing positive parent-child interactions and learning at home. The app sends regular game ideas to parents/guardians that they can play with their children, combined with information on child development. The design of the app applies behavioural insights to help seed positive habits of play and interaction at home by sending tailored prompts, encouragement, and reminders to parents/guardians.

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### Sounds good...?

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SEPTEMBER - OCTOBER 2017	<p>Work together to recruit parents/guardians to the study</p> <p>The research team will provide you with materials and information to help you recruit and gain consent from parents/guardians for them to take part and their children to be assessed. You will need to recruit at least 13 parents/guardians of children who are starting school (reception) in September 2018 to take part in the study. Although other parents /guardians in nursery and reception classes can join EasyPeasy if they wish, without signing the consent form and without participating in the research trial and we encourage this! Consent forms are to be returned to the research team based at Durham University.</p>
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DECEMBER 2017	<p>You will find out when your school will receive EasyPeasy</p> <p>At this point, you will be notified if your school will start EasyPeasy in January 2018 (Intervention Group) or in September 2018 (Control Group)</p>
JANUARY 2018	<p>EasyPeasy will deliver Pod Leader training via webinar</p> <p>If you've been selected to receive EasyPeasy in January 2018, your Pod Leader will participate in a two-hour online training session to get familiar with EasyPeasy and how to use it to your school's advantage. Training will take place during the first couple of weeks in January.</p>



JANUARY - JUNE 2018	<p>The EasyPeasy programme will begin</p> <p>If you are in the intervention group you will start the EasyPeasy programme now!</p> <p>If you are in the Control Group, you will continue with your usual practice until you start EasyPeasy in September 2018.</p> <p>Throughout the next 5 months a member of the research team may wish to visit your school to talk to teachers/practitioners and also a group of parents/guardians. We will of course let you know if we would like to visit your school and give you further information. We would appreciate your support with these visits, and we'll make sure they are at a time most convenient to you.</p>
JUNE - JULY 2018	<p>Researchers will collect post-intervention data</p> <p>Research assistants will return to your school to collect information about language and communication from the same children who were assessed in October-December 2017. This will happen regardless of whether your school received EasyPeasy in January 2018 or are due to receive it in September 2018.</p> <p>A relevant practitioner/teacher will be asked to report on children's behaviour and self-regulation.</p> <p>If you have been running EasyPeasy since January 2018, we would like certain staff members to complete a short survey. These will be posted for you to complete.</p>
SEPTEMBER 2018	<p>Long-term follow up begins, and Comparison Group schools start EasyPeasy</p> <p>You will be asked to provide school destination information for each child who participated in the assessments.</p> <p>If you were allocated to receive EasyPeasy app in September 2018, the EasyPeasy team will provide you with training dates and all the information and support you need to get started!</p>

*We look forward to working with you!*

## Appendix 3: Parent Information Sheet and Consent Form



### Hello from EasyPeasy!

#### What is EasyPeasy?

With EasyPeasy, playing together helps your child develop key skills for school and life.

EasyPeasy is a new service that sends you fun, simple game ideas to your mobile phone. Our games are designed with experts to build your child's language and communication skills, self-control, resilience, and concentration. Our games are for playing together, in the real world - not on the screen! You can watch real families play the games in their own living rooms, and see how other parents/guardians support their children to overcome challenges, create new ideas, listen and concentrate, and celebrate success. EasyPeasy features lots of different families, and children of different ages and stages of development.

#### What are we doing here?!

Your nursery class signed up to take part in a national research trial of EasyPeasy. The results of this research will make an important contribution to the evidence base on early intervention and social mobility. To take part, the school agreed to enter a lottery to get EasyPeasy either in January 2018 or September 2018. This is important so that the research team conducting the research trial can compare families in nursery classes who are using EasyPeasy, with families in nursery classes who aren't. In December 2017 your nursery class and your local authority will find out when they will receive EasyPeasy.

#### What is the research for?

The aim of this research trial is to find out how parents/guardians use EasyPeasy and develop an understanding of how it supports children's development. This research trial will build on existing evidence from the University of Oxford (funded by the Sutton Trust) showing EasyPeasy as an effective method for building your child's concentration and for improving your own ability to set and stick to boundaries at home.

#### What's the age group?

EasyPeasy games are for parents/guardians with children aged two to five. They are designed so you can adapt them easily for your child, or for playing with more than one child at a time.

#### Will I have fun playing?

Yes! EasyPeasy is new, but thousands of families are already playing and learning with EasyPeasy. All of our games have been tested with real parents/guardians and real children, and we only add new ones when we're convinced that they're fun as well as building key skills.

#### Who is the team behind EasyPeasy?

The EasyPeasy team is a small group of designers, educators, programmers and researchers based in Hoxton, East London, who are passionate about using technology to create a better world. Come and say hello to us on Facebook at [www.facebook.com/easypeasycommunity](https://www.facebook.com/easypeasycommunity)

To get the chance to receive EasyPeasy for free, please sign up to our trial! If you take part, our research team will need to collect some information about you and your child. This will happen at the nursery.



### What will happen if my nursery is selected to receive EasyPeasy in January 2018?

The programme will start in January 2018. Your nursery will send you a text message inviting you to join EasyPeasy, with a link that you can click to get started. You won't need to download anything.

Each week, for a total of 20 weeks, EasyPeasy will share a new game idea with you via a link in a text message. You will be able to watch a family playing the game, and find out how playing the game can help your child. You will also be able to comment on the game and read the comments of other parents/guardians who are receiving them too. Your nursery class practitioners will be able to read and post comments too. If you decide you no longer want to receive EasyPeasy games, you can tell a practitioner at your nursery that you want to stop.

### What will happen if my nursery is selected to receive EasyPeasy in September 2018?

EasyPeasy will be offered to those families with children in the nursery classes starting in September 2018.

We hope you will want to take part in our trial, but before you decide, it's important you understand what it will involve.

Please take some time to read through this information.

### What information will I need to provide?

Regardless of when the nursery receives the EasyPeasy app the research team would like to collect some information from you and your child (e.g. date of birth, gender, ethnicity, education). To help us understand how children progress in nursery, we would like your child to take part in a short assessment lasting 20 minutes, once in Winter 2017 and again in Summer 2018 which will tell us about us about your child's language and communication skills. This will happen while your child is at nursery. Here your child will sit with a researcher who will ask your child questions using a series of pictures. A staff member from the nursery can sit with your child too if they would like to. If your child does not want to take part on the day, they do not have to. Your nursery will have access to the results and will be able to share them with you should you wish to know. We would also like your child's teacher to complete a short survey on your child's behaviour and social-emotional development, this does not require anything from your child. Your child's teacher will return the survey to us directly.

### What happens to my information?

All research staff who will enter nurseries as part of this project will have Disclosure and Barring Service (DBS) clearance. All data collected during this research trial will be stored securely, treated confidential, used only for research purposes and shared between the research teams at EasyPeasy, Durham University, University of York and the Education Endowment Foundation. Everyone who has access to research data has a duty of confidentiality and is responsible for handling study data in accordance with applicable Data Protection law(s) and has undergone relevant data protection training. None of the information we collect will affect your child's place at nursery or school. For the purpose of this research trial, information provided will be linked with the National Pupil Database (held by the Department for Education), other official records, and shared with EasyPeasy, the Department for Education, Education Endowment Foundation (EEF), EEF's data contractor FFT Education and in an anonymised form for future research purposes. The research team at Durham University and University of York will store the data gathered from the project, including personal data, for up to five years after the end of the trial, to allow time for it to be properly analysed, published and reviewed. After this period it will be securely destroyed. At the end of the project a final report, will be made publicly available on the Educational Endowment Foundation website (<https://educationendowmentfoundation.org.uk>), for anyone who is interested in the findings of the research. You, your child and your child's nursery school will not be identified in any report.

### Who is conducting this research?

This research trial is being led by Dr Lyn Robinson-Smith at Durham University in collaboration with the University of York. It is part of a national project funded by the Education Endowment Foundation. This research trial has received full ethical approval from Durham University's

School of Education Ethics Committee on 31<sup>st</sup> August 2017 and the University of York's Health Sciences Education Committee on 1st September 2017. If you have any ethical concerns about the research you can contact the Durham Ethics committee directly at: [ed.ethics@durham.ac.uk](mailto:ed.ethics@durham.ac.uk).

### What if there is a problem?

If you have any questions or concerns about the EasyPeasy app please contact Jane Bradbury at [jane@easypeasyapp.com](mailto:jane@easypeasyapp.com). If you have any questions or concerns about the research trial please contact Linda Wang on [easypeasyevaluation@cem.dur.ac.uk](mailto:easypeasyevaluation@cem.dur.ac.uk) or 0191 334 4367. They will aim to answer your query as soon as possible.

### What should I do next?

You can choose whether or not you would like to take part in this research trial and you can ask as many questions as you like before deciding. If you would like to take part, fill in the attached form and return it to the children's centre or nursery. You can withdraw at any time, without giving a reason, by telling a member of the research team or a staff member at your nursery. If you decide to withdraw, we will use the data we have collected as part of the research trial, unless you ask us not to.

*We hope you will take part!*



## Parent/guardian consent to take part

If you are happy for you/your child to participate in the EasyPeasy research trial, please read each of the following statements and if you agree to them initial the boxes, fill in the other details and sign and return to your child's nursery.

- ☐ I agree that the project has been explained to me. I understand the information sheet and I have had a chance to ask questions.
- ☐ I understand that I can choose to take part, and if I decide at any time that I no longer wish to take part, for any reason, I can withdraw immediately.
- ☐ I understand that information about my child and I (e.g. date of birth, gender, ethnicity) collected as part of this research will be stored and handled in line with the requirements of the Data Protection Act, stored securely, treated confidentially, shared between the research teams at EasyPeasy, Durham University, University of York and EEF and used only for research purposes. Information about my child will be analysed anonymously and my child's name will not be used in any research reports or publications.
- ☐ I understand for the purpose of this research trial, information provided will be linked with the National Pupil Database (held by the Department for Education), other official records, and shared with EasyPeasy, the Department for Education, Education Endowment Foundation (EEF), EEF's data contractor FFT Education and in an anonymised form for future research purposes.
- ☐ I understand what to do if I have a concern about the research.
- ☐ I agree for my child's language and communication skills to be assessed by a researcher at two-time points during the research trial.
- ☐ I agree for my child's teacher to complete a survey to record my child's behaviour and social-emotional development.
- ☐ I agree for the nursery class to provide the research team with information about my child, e.g. which school my child will attend in September 2018, gender and date of birth (to be used for research purposes only).
- ☐ If the nursery class does not have the necessary information, I agree to be contacted in Autumn 2018 to confirm which school my child is attending.
- ☐ I agree to take part in the research trial.

My name:.....

Mobile phone number:.....

My child's name (first name and surname):.....

Email address:.....

My signature:.....

Date:.....