



Trial Protocol: Testing the effect of community-based English language provision on language ability and integration outcomes

Ministry of Housing, Communities and Local Government

Role	Name	Email	Organisation
Principal Research Officer:	Robert Rutherford	Robert.Rutherford@communities.gsi.gov.uk	MHCLG
	Miriam Light	Miriam.Light@communities.gsi.gov.uk	MHCLG
Social Researcher:	Robyn O'Connor	Robyn.O'Connor@communities.gsi.gov.uk	MHCLG
Associate Advisor:	Chris Larkin	Chris.Larkin@behaviouralinsights.co.uk	Behavioural Insights Team
QA:	Michael Sanders	Michael.Sanders@behaviouralinsights.co.uk	Behavioural Insights Team

Contents

Executive Summary	3
Background	3
Aims	5
Social impact aim.....	5
Research aim.....	5
Partner Information.....	5
Design.....	5
Sample selection.....	7
Participant Pool.....	7
Eligibility	7
Randomisation.....	8
Outcome Measures	9
Data Gathering	10
Data Storage and Transmission	11
Interventions.....	11
Procedure	12
Power Calculations.....	13
Analysis.....	16
Secondary analysis	17
Ethical Issues.....	17
Annex 1: Copy of survey.....	19
Annex 2: Copy of randomisation code	27
Annex 3: Copy of monitoring data questions.....	28
Annex 4: Copy of consent form.....	36
Annex 5: Marking Schema for English Language Test	38

Executive Summary

This protocol sets out the technical and logistical details of cluster randomised controlled trial (RCT), to be undertaken by the Ministry of Housing, Communities and Local Government (MHCLG) in 2016. The aim of the trial is to evaluate the delivery of community-based English language provision funded by MHCLG with respect to its effect on English proficiency, participation in wider society and integration (or social mixing).

The participants in the trial are approximately 600 individuals who are resident in communities MHCLG has identified as being isolated or with high concentrations of specific ethnic/religious groups, and low levels of English language proficiency. All delivery locations are in Greater Manchester and West Yorkshire. The trial will have two arms – and individuals (or small clusters of individuals) will be randomly assigned to either a control or treatment group. Randomisation, fieldwork and analysis will be undertaken by the procured research agency, the Learning and Work Institute (LWI), and will be managed by MHCLG. The trial is run as a stepped-wedge design (i.e. a waitlist design) and so all participants in the control group will eventually receive the treatment.

Individuals in the control group will receive no intervention (or, business as usual) for the duration of the trial period (although, they will eventually receive a similar intervention) and those in the treatment group will participate in a course of Community-Based English Language (CBEL) provision. CBEL provision has already been delivered by six providers across England in 2013-15. One of these, Talk English (a consortium led by Manchester City Council), will continue delivering for the trial period,

Delivery will start in April and May 2016 and will run for 11 weeks. The primary outcome measure is the average change in English language proficiency as measured by a bespoke assessment administered before and after the course. Secondary outcomes will include the average change in key responses to questions in a pre- and post-survey that will be administered to learners by an external research agency, and the difference in proportion of learners expressing interest in accessing additional local service provision.

Background

In 2012, MHCLG published *Creating the Conditions for Integration* which outlined the Government's strategy for helping isolated communities to integrate with British society. The report set out a number of priority areas and suggestions, including promoting "an understanding not just of English language, but also of British life and of the values and

principles which underlie British society”.¹ Speaking the host language is an integral part of the integration process for migrants.²

It permits access to basic services and connections with the broader society beyond the migrant’s own ethnic and linguistic community. Increasing connections between migrant communities and British society helps foster a mutual understanding of value systems, and in turn increases integration of migrant groups. English proficiency is positively associated with a sense of belonging to Britain, better education and employment and earnings.³

In July 2015 the Prime Minister set out his priorities for tackling extremism in a speech in Birmingham. He emphasises the importance of building a more cohesive society and reaching out to some of the most isolated communities in the country where there are high concentrations of non-English speaking migrants. He also asked Louise Casey to conduct a review and write a report on policies toward combatting isolation and promoting opportunity, to report by summer 2016.

The Integration & Faith Division at MHCLG funds a number of programmes to help increase integration, but to date monitoring and evaluation has relied on process tracking, and before and after analyses. MHCLG decided to run an RCT to evaluate CBEL provision to feed into evidence being generated and gathered for the Casey Review, and subsequent interventions in this policy area.

¹ Department for Communities and Local Government (2012) *Creating the Conditions for Integration*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7504/2092103.pdf (Accessed November 19, 2015).

² Remennick, L. (2004). Language acquisition, ethnicity and social integration among former Soviet immigrants or the 1990s in Israel. *Ethnic and Racial Studies*, 27(3): 431-454; Joppke, C. (2007). Beyond national models: Civic integration policies for immigrants in Western Europe. *West European Politics*, 30(1): 1-22.

³ Cabinet Office (2014) Community Life Survey 2013 to 2014. Unpublished analysis of strength of belonging to Britain and English proficiency. Data available at: <https://discover.ukdataservice.ac.uk/catalogue/?sn=7560> (Accessed: January 16, 2015); Aoki, Y. and L. Santiago (2015) *Fertility, Health and Education of UK Immigrants: The Role of English Language Skills*. Available at: http://www.cinch.uni-due.de/files/workingpapers/1510_CINCH-Series_aoki.pdf (Accessed: February 02, 2016); ONS (2014) *English Language Proficiency in the Labour Market*. Available at: http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/dcp171776_351045.pdf (Accessed: February 02, 2016).

Aims

Social impact aim

- a) To increase functional English language proficiency of programme participants
- b) To increase integration amongst people living in some of the most isolated communities in England.

English language proficiency is the primary outcome measure, with integration (measured in terms of participation in wider society, mixing, and attitudes towards those from different backgrounds) secondary outcomes.

Research aim

The trial aims to test whether participation in CBEL provision increases the English language proficiency of learners relative to whatever else they would have done in the absence of the programme (i.e. versus the counterfactual of participation).

Partner Information

The trial is being undertaken in collaboration with Talk English. The provider will be responsible for recruiting teachers, learners, and delivering the CBEL programme in line with the specifications set by MHCLG (see below in the 'Design' and 'Intervention' sections for more detail).

Talk English is one of six providers that delivered CBEL classes in previous rounds of MHCLG funding.

From the Talk English website: *"The Talk English project is working with people with low levels of English to help them improve their language skills, access services and get more involved in the community."*

Design

The trial is a two-armed cluster randomised controlled trial design. It is a stepped wedge (waiting list) design in that all participants eventually receive the intervention but are randomly assigned to an intervention group receiving the intervention straight away, while the control group 'wait' to receive the intervention after the others have completed.

The units of recruitment are individuals with pre-Entry level or Entry level 1 English language ability (as defined by ESOL classification criteria – but assessed by the provider). Learners should have been resident in the UK for more than 12 months, not be eligible for mainstream ESOL support as delivered via the Skills Funding Agency, and aged 19 and above (again, as assessed by the provider). Individuals will be recruited directly by Talk English.

Randomisation will be undertaken on participant clusters to ameliorate potential spill over of the treatment effect between treatment and control groups.

People in the treatment group will participate in an 11 week course of CBEL provision.

Talk English Together will consist of a blend of staff led and volunteer-supported learning opportunities. Over 11 weeks, learners will participate in the following programme, in groups of 12:

- Talk English Together Courses will run twice a week for 11 weeks (44 guided learning hours). Courses will be taught by a qualified ESOL teacher, with additional classroom support provided by two or three volunteer Talk English Friends, recruited and trained via the main project.

Courses will focus on developing the English language skills of learners, increasing their confidence in using English language and their participation in the community.

- Talk English Together Clubs will run once a week for 11 weeks (22 guided learning hours). Clubs will be supported by two volunteer Talk English Friends and supervised by the qualified ESOL teacher. Learners enrolled on the Courses are expected to attend the Club in addition to their Course. They will provide learners with the opportunity to put their skills into practice and to access the local community. Volunteer Friends will provide 1:1 / small group support to learners. Independent learning skills such as using the internet to support learning will also be supported.

(Full details in the Talk English Together Manual 2016)

LWI will administer a survey to learners in both trial arms during the first week of intervention group classes and again during the final week of classes. The survey has been constructed in collaboration with the Behavioural Insights Team (a copy can be found as Annex 1). The survey was piloted by MHCLG in October 2015 among ex-learners from previous rounds of delivery. A revised version was then cognitively tested and piloted by BMG Research (who are working in partnership with LWI) in April 2016. The survey aims to measure:

- Use of English
- Diversity of friendship groups
- Independent activity
- Confidence in communicating in English in specified situations
- Empowerment
- Trust
- Belonging
- Voting
- Interest in further activities

We will measure the average score on each question (when on a Likert scale) or the proportion of responses to one category (when they are dichotomous questions) among the treatment and control groups.

The English language assessment will be administered at the same time as the survey by trained ESOL practitioners to obtain a measure of distance travelled in terms of language proficiency. This test is being developed and administered by ESB (English Speaking Board).

More details on what the survey seeks to measure, other data used in our analysis, and the English language test can be found below in the 'Outcome measure' and 'Data gathering' sections.

Sample selection

Participant Pool

All individuals will be recruited by the CBEL provider in the 1-2 month period prior to start of delivery in April 2016. We estimate this will be around 600 individuals.

Eligibility

There are several pre-defined criteria for programme eligibility. These are that learners:

- 1) Have low levels of English language proficiency (entry 1 or pre-entry level);
- 2) Are resident in a specified local authority area with high numbers of women with poor levels of English language ability as defined in the census 2011
- 3) Not eligible for other English language provision (for example, through entitlements through their employers or through eligibility for Job Seekers Allowance);
- 4) Have been resident in the country for more than 12 months.

In addition to these criteria there are also recruitment guidelines that encourage recruitment of women from Pakistani, Bangladeshi and Somali communities, as these groups have the lowest self-reported levels of fluency in English.⁴

The over recruitment of women is expected to follow largely from eligibility criteria number 2 and 3 in the above list, as being employed entitles one to other English language provision

⁴ MHCLG (2011) *Citizenship Survey 2010-11*. Unpublished analysis of rates of (self-reported) below average or poor spoken English by ethnic group and country of origin. Data available at: <https://discover.ukdataservice.ac.uk/catalogue/?sn=7111&type=Data%20catalogue>. (Accessed: February 03, 2012); ONS (2011) Unpublished analysis of ethnic group by proficiency in English by sex by age (Table CT0558). Data available at: <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/published-ad-hoc-data/census/ethnicity/ct0558-2011-census.zip>. (Accessed: January 21, 2016).

(offered by BIS/DWP) and women are more likely to be unemployed than their male counterparts (around 80% of CBEL learners are expected to be women). The over recruitment of people from Pakistani, Bangladeshi and Somali communities is expected to follow from eligibility criteria number 2 as the most isolated communities in the country often contain a concentration of ethnic minority residents. For the purposes of the trial we are interested in outcomes for all learners recruited.

The programme providers will conduct the initial assessments of eligibility based on the criteria set out above (language proficiency is assessed using a standardised screening tool, and prospective learners are asked to self-declare their eligibility on other criteria e.g. length of residency). Programme providers will then complete a registration form for eligible learners, which will be sent to research partners LWI to randomise.

Randomisation

Initially we planned to undertake individual randomisation due to the relatively small sample size. However, through preliminary field research we learned that some participants attend CBEL classes as couples or as part of a neighbour/friendship-group. We do not have data on the proportion of participants attending like this, but through interviews with previous providers we understand this is relatively small. Nonetheless, if participants are individually randomised, and a couple are assigned to different treatment conditions, it is probable that any effect of the programme on the participant in the treatment group would be transferred (to a greater or lesser degree) to the participant in the control group, thus leading to an underestimate of our true treatment effect. To mitigate this risk of contamination, we will randomise at the cluster level where clusters are signups to the programme. If a couple or neighbour/friendship-group wish to attend the classes together they must sign up as one unit and will therefore always be assigned to the same condition. While most clusters will comprise one participant, some will be >1 . In order to see if cluster size changes the treatment effect our analysis will control on cluster size. Each cluster will be randomly allocated on a one to one basis to intervention or control status.

Once recruitment has taken place by Talk English consortium partners, lists of all trial participants in a specific location will be sent to LWI. They will conduct the randomisation using the statistical computing environment R (code can be found in the Annex 2) using anonymised data comprising a learner's unique ID, signup cluster, and class location. It will be done on a staggered basis when recruitment numbers are sufficient to do so at each location (this is expected to occur in 3 waves in late April and early May). This will allow providers to inform participants of their trial status – treatment or control (communicated as 'April' or 'September' group).

Participant lists indicating the allocation of participants to the treatment or control condition will be sent back to Talk English consortium partners. They will inform and deliver the

programme to those in the treatment group and assign the control group to the waitlist. There will be roughly even numbers in both trial arms, and randomisation will be stratified on signup location to ensure even proportions at each delivery location.

Outcome Measures

Our outcome measures are obtained via a pre- and post-English language proficiency test which will be administered by the English Speaking Board (ESB) and a pre- and post- survey administered by BMG research (on behalf of LWI).

The primary outcome measure, English language proficiency, will be assessed via a bespoke test. This can be seen in Annex 5. This provides a nine point scale on which English proficiency in the speaking and listening, reading and writing can be measured. The trial will focus on the collection and analysis of the speaking and listening scores, however data on reading and writing proficiency will be collected and analysed. This test will be administered by trained ESOL assessors deployed by the ESB for specifically for this project, and will be administered to all learners post-randomisation. This scale has been developed for this project, based on expert knowledge of assessment methods.

Integration outcomes will only be considered once the primary outcome has been measured. These will be obtained via a survey, also administered pre-intervention and post-intervention, and will be based on four key themes:

- 1) Confidence using functional English in a variety of day-to-day settings (such as speaking to a child's teacher, or visiting a GP by yourself)
- 2) Recent use of functional English
- 3) Civic engagement, social mixing with and attitudes to those from other backgrounds
- 4) Participation in wider society (i.e. ability/confidence to travel alone)

Some of the questions have come from existing surveys (including the Citizenship Survey and European Social Survey) with slight amendments based on early suitability pilots with previous learners. Others are taken from Dr. Antonio Silva's (BIT) work exploring inter-group trust in Northern Ireland. Others have been created anew for this research. The survey has been cognitively tested and piloted by the research providers (20 cognitive interviews were undertaken by community researchers in Urdu, Bengali, Punjabi, Somali and Arabic). The revised survey was then piloted with 20 respondents, drawn from similar populations to CBEL eligible learners. For the Citizenship Survey and Dr. Silva's questions, factorial analysis has been undertaken on a range of scales to isolate the most predictive items. This has the benefit of giving us a more realistic estimate of some items' standard deviation with which to run power calculations (see 'Power calculations' section below for more details).

In addition to the surveys and proficiency tests, we will also be using another form of data capture to gauge levels of interest in using other local services. This will be done through expressions of interest to find out more information about the services mentioned. The CBEL provider will use a mix of desk-based research, local knowledge, and networks with community organisations to compile a list of 10 -15 different community services (which may include volunteering opportunities and classes in the local library). This list will then be distributed to the treatment group at the end of the CBEL programme delivery with the option for learners to sign up as an expression of interest and to find out more information. If they do express an interest, some information regarding service provision will be made available to that learner (and for each service they express interest in), including location, opening times, cost, etc. The same list of services will also be presented to learners in the control group. We will then be able to compare the proportion of the treatment group vs. the proportion of the control group that expresses interest in taking advantage of other local service provision.

We will additionally be asking the control group at the end of the 11 week period the types of activities, if any, they have engaged in.

Data Gathering

Data will be gathered by Talk English, ESB and BMG Research with LWI responsible for the collation and analysis of all trial data.

There are three main sources of data:

- 1) administrative data
- 2) pre-, interim, and post-programme English proficiency tests
- 3) pre- and post-programme surveys.

Administrative data will be collected by Talk English partners via the learner registration form during registration events and the course registers and lesson records during delivery of the intervention. These data include demographic characteristics which will be used to control on in our analysis (see below 'Analytical strategy' section for more details). There will no doubt be some attrition and partial attendance during the intervention. Administrative data collected by class tutors during the intervention (e.g. coding the course registers into an attendance score for each learner) will enable us to look for variation in treatment effects contingent on attendance.

Once participants are assigned to a condition, the delivery partners will invite those in the treatment group to attend their first class at a specific time/location. Those in the control group will be invited to an introductory session in the same location. At this point the baseline

measures will be obtained. The pre-survey will be collected by BMG research and pre-proficiency test by ESB.

An interim proficiency test will be administered by ESB to a random sample of 50 learners from the treatment group at the 6 week mark.

The post-survey and post-proficiency test will be administered in the final week of classes for both the treatment condition and control groups (by BMG Research and ESB respectively).

All participants will have a unique reference number and an indicator for the size of their cluster.

Data Storage and Transmission

Data handling and management will be governed by the contractors' data management protocols to comply with the Data Protection Act and ISO 20252. Final data will be anonymised and stored on secure hard drives accessible only to MHCLG staff and appropriately-cleared contractors. Data will not be transmitted to third parties, except where this is appropriate under the conditions of appropriate data sharing agreements, and consents.

Interventions

Preliminary fieldwork, including interviewing programme managers, programme coordinators, tutors, and ex-learners, revealed that there is already a fairly high degree of standardisation within the Talk English programme. However, there are some additional criteria which MHCLG are setting as requirements. These are that it will be 11 weeks in length, and modular. It will include six external visits (to the supermarket, pharmacy, a leisure centre, etc.) and 2 visitors (e.g. healthcare professional, councillor). The modules will be of a practical nature (i.e. one module might be 'visiting the doctors'). A detailed programme manual has been developed to ensure the curriculum will be implemented in as uniform way as appropriate for an ESOL programme and that the level of standardisation is well understood by partners.

Talk English will be responsible for monitoring compliance with the broad curriculum requirements, and MHCLG will monitor this through weekly catch up calls. If, at specific delivery sites, there is significant deviation from the curriculum a plan will be developed by MHCLG and to ensure the core modules are still delivered within the remaining time of the programme. A process evaluation will be implemented alongside the RCT, involving fieldwork with the providers during implementation, analysis of drop out and follow up with learners after the course on their reflections, motivations and qualitative impacts. This will capture any variations in delivery, issues around implementation, and help explain patterns found in the data.

Procedure

Below is an outline of the trial procedure:



Power Calculations

We have undertaken power calculations to enable identification of a target sample size.

As we do not know the standard deviation of the English Language test scores or the expected scores at baseline we have estimated using a simple binary outcome measure. This means that our estimates are therefore cautious and further analysis of the baseline scores in May 2016, may allow further precision.

The hypotheses below are phrased with respect to the English language scores, however in all cases we are simply looking at the difference in proportions (in the case of dichotomous variables), average scores (in the case of continuous scales), between the treatment and control groups.

H_0 = there is no difference in the observed levels of English language ability between the treatment and control groups; and the

H_a = there is a difference in the observed levels of English language ability between the treatment and control groups (i.e. a two-sided alternative hypothesis)

- ♦ Power: **80%** ; Significance level: **5%**
- ♦ We have 2 trial arms
- ♦ We have assumed up to 30% dropout (this is based on evidence from provider interviews)⁵

Given that most of our clusters will comprise just one individual, we have assumed an especially low intra-cluster correlation rate (ICCR) of 0.025. We have also assumed that of the ~400 participants 10% will be in clusters >1. This means that for 360 participants $m=1$, and we assume for the remaining 40 $m=2$. Therefore, the total $m=1.05$.

We have run power calculations twice, once for a binary outcome and again for a continuous outcome. The binary calculations can be interpreted as proportions where the minimum detectable effect size (MDES) is the proportion of people in the treatment group doing something relative to the control group. We have varied the baseline proportion three times from 0.50, 0.10, and 0.05. NB: these power calculations are for a simple OLS of outcome on treatment indicator; the MDES will likely decrease when we include covariates on age, ethnicity, etc., and we will be able to detect a smaller effect size at a 0.05 significance level.

⁵ We have assumed an additional 20% will likely not be of the demographic we are most interested in (i.e. Muslim women) but we will still be able to collect the primary outcome measure for this – but not for the attitudinal survey measures where their main language is not one of the 5 translated languages.

Baseline proportion	Nn	Design Effect	Nt	MDES (Minimum Detectable Effect Size)
0.50	400	$1+(m-1)*ICCR^6$, where $m=1.05$ and $ICCR=0.025$, = 1.02625	389.76	0.1401 (14.01%)
0.10	400	$1+(m-1)*ICCR$, where $m=1.05$ and $ICCR=0.025$, = 1.02625	389.76	0.0680 (6.80%)
0.05	400	$1+(m-1)*ICCR$, where $m=1.05$ and $ICCR=0.025$, = 1.02625	389.76	0.0430 (4.30%)

Code for binary outcomes (R):

```
n <- 389
arms <- 2
baselineProportion <- 0.50

nPerArm <- n/arms
test <- pwr.2p.test(n=nPerArm, h=, sig.level = .05, power = 0.8, alternative =
"two.sided")

treatmentProportion <- (sin(asin(sqrt(baselineProportion)))-(test$h/2))^2
baselineProportion – treatmentProportion
```

Given the absence of pre-collected data using our primary outcome measure (it being bespoke for this trial), we have taken a simple approach to deriving our design effects. Following Rutterford et al (2015)⁷ we have derived the design effect as $1 + (m-1)p$ where m is the average cluster size, and p is the intra-cluster correlation rate which we have estimated to be very low at 0.025. We have also run power calculations for a continuous outcome to estimate the movement we would need to see in English language proficiency in order to detect it at a statistically significant level. Even though we do not know the standard deviation, we have assumed a normal distribution with a mean of 6, and have adjusted the

⁶ The ICCR measures the proportion of the overall variation in the outcome which is explained by within group variance.

⁷ : Rutterford, C., Copas, A., & Eldridge, S. (2015). Methods for sample size determination in cluster randomized trials. *International Journal of Epidemiology*, (Advanced access):

standard deviation three times from 2.5 to 3.0 to 3.5 to show different MDES within this range. We also adjusted the Nn from 400 to 350 and 300 within each SD variation to see how much any potential under-recruitment would affect the MDES.

Standard deviation	Nn	Design Effect	Nt	MDES
2.5	400	1+(m-1)*ICCR, where m=1.05 and ICCR=0.025, = 1.02625	389.76	0.7119
	350		341.05	0.7607
	300		292.33	0.8220
3.0	400		389.76	0.8543
	350		341.05	0.9128
	300		292.33	0.9864
3.5	400		389.76	0.9967
	350		341.05	1.0649
	300		292.33	1.1508

Code for continuous outcomes (R):

```
n <- 389
arms <- 2
standardDeviation <- 3.0

nPerArm <- n/arms
test <- pwr.t.test(n=nPerArm, sig.level = .05, power = 0.8, alternative = "two.sided")
test$d * standardDeviation
```

This was varied between 389, 341, and 292

This was varied between 2.5, 3.0, and 3.5

By way of example, the upper most right hand box shows an MDES of 0.7119. This indicates that if our data is centred on 6 and has a standard deviation of 2.5 we would be able to detect a statistically significant effect if we see a movement of 0.7119 along the 9 point scale.

While these power calculations are estimates, baseline data will be obtained between the w/c 25th April and w/c 9th May and used to re-run the power calculations based on actual sample data on the outcomes of interest. These revised calculations will be added to the Annex once available.

Analysis

The following linear probability model will be used to analyse the change in pre- and post-programme English language ability amongst the learners when the outcome is a continuous variable. The model will take the form:

$$Y_i = \alpha + \delta\gamma_i + \beta X_i + \varepsilon_i$$

Where:

Y_{it} : is a continuous variable equal to the average change in pre- and post-English language proficiency in cluster 'i'.

α_i : is the constant, the point where the regression line meets the y-axis.

γ_i : is a binary treatment indicator, equal to 1 if cluster 'i' is assigned to treatment condition, and 0 if assigned to the control condition. δ can therefore be interpreted as the average effect of the treatment.

X_i : is a vector of covariates, including: signup location, cluster size, learning duration, ethnicity, social capital measure included within the monitoring data (see Annex 3 for copy of monitoring data form), age, length of time in the country, gender, a binary indicator for access to alternative provision (for the control group).

ε_i : is an error term with White robust standard errors clustered to the signup level.

When analysing the ordinal outcomes of the pre- and post-surveys we will specify an ordinal logistic model of the form:

$$\log \left(\frac{P(Y_i \leq j)}{P(Y_i > j)} \right) = \alpha_j - (\delta\gamma_i + \beta X_i)$$

Where X_i contains the same covariates as in the above OLS model. All results will be reported as log odds.

In addition to analysing the ordinal outcomes using the above ordinal logit model, which will tell us the odds of seeing someone move between categories on the Likert scale, we will also conduct t-tests on the average score of participants between groups.

Secondary analysis

We will undertake secondary analysis to look at differential treatment effects on language proficiency along ethnic and gender lines, as well as things such as motivation for joining the programme, type of delivery location (e.g. a library or a children's centre).

Analysis of the responses to the questionnaire will look for patterns, and significance of differences between the control and intervention group on a range of metrics. Overall however we adopt the principle that for the purposes of the trial the primary hypothesis is that English Language ability is the primary outcome and it is this outcome we are testing. Secondary outcomes such as confidence, empowerment, integration and interest in accessing additional local service provision will be considered if the null hypothesis is rejected for the primary outcome.

We will also conduct an interim analysis on the 6 week proficiency test. While this is unlikely to be a large enough sample to derive statistically significant results, we expect it will provide an indicator as to the progression curve of the programme. If results from the interim analysis show that a high percentage of the overall treatment effect was already achieved at this stage it may justify running a future trial to look at a much-condensed version of the CBEL programme.

A full analysis plan setting out the detailed analytical strategy will be agreed with LWI in advance of completing data collection and will added as a further Annexe to this document.

Ethical Issues

Informed consent will be obtained from all learners as a condition of their participation in the programme. The purpose of the programme is to test whether CBEL provision has an effect on language proficiency and integration outcomes. Participation is therefore only possible if learners are willing to share data with MHCLG and complete the surveys and proficiency

tests. Participation is voluntary but will be premised on consent which we will obtain using a form pre-randomisation (see Annex 4 for a copy). After the programme has completed, all participants will be asked for additional consent to obtain National Insurance Numbers in order to facilitate longer term analysis of the data (for example, with respect to benefit claims, employment, and tax receipts). Consent forms have been translated into the 5 main languages identified by Talk English consortium partners (these are Urdu, Bengali, Punjabi, Somali and Arabic).

Additionally, this programme has already been delivered by six providers and our specifications do not change it substantially. We do not think that participation in English language classes poses any threat of physical/emotional harm beyond that which would otherwise be experienced in daily life.

Annex 1: Copy of survey

Translated into Urdu, Bengali, Punjabi, Arabic and Somali

1. Apart from your English class, how many people did you speak to last week using English? (Please ✓ one)	
0 people	<input type="checkbox"/>
1 to 2 people	<input type="checkbox"/>
3 to 4 people	<input type="checkbox"/>
5 to 6 people	<input type="checkbox"/>
7 to 8 people	<input type="checkbox"/>
9 to 10 people	<input type="checkbox"/>
11 to 12 people	<input type="checkbox"/>
13 to 14 people	<input type="checkbox"/>
15 to 16 people	<input type="checkbox"/>
17 to 18 people	<input type="checkbox"/>
19 to 20 people	<input type="checkbox"/>
21 or more people	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

2. Apart from your English class, how many people did you speak to last week from a different country or religion to you? (Please ✓ one)	
0 people	<input type="checkbox"/>
1 to 2 people	<input type="checkbox"/>
3 to 4 people	<input type="checkbox"/>
5 to 6 people	<input type="checkbox"/>
7 to 8 people	<input type="checkbox"/>
9 to 10 people	<input type="checkbox"/>
11 to 12 people	<input type="checkbox"/>
13 to 14 people	<input type="checkbox"/>
15 to 16 people	<input type="checkbox"/>
17 to 18 people	<input type="checkbox"/>
19 to 20 people	<input type="checkbox"/>

21 or more people	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**3. How many friends do you have to rely on if you have a problem, or need help or advice?
(Please ✓ one)**

0 people	<input type="checkbox"/>
1 to 2 people	<input type="checkbox"/>
3 to 4 people	<input type="checkbox"/>
5 to 6 people	<input type="checkbox"/>
7 to 8 people	<input type="checkbox"/>
9 to 10 people	<input type="checkbox"/>
11 to 12 people	<input type="checkbox"/>
13 to 14 people	<input type="checkbox"/>
15 to 16 people	<input type="checkbox"/>
17 to 18 people	<input type="checkbox"/>
19 to 20 people	<input type="checkbox"/>
21 or more people	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**4. How many of your friends are from a different country or religion to you?
(Please ✓ one)**

0 people	<input type="checkbox"/>
1 to 2 people	<input type="checkbox"/>
3 to 4 people	<input type="checkbox"/>
5 to 6 people	<input type="checkbox"/>
7 to 8 people	<input type="checkbox"/>
9 to 10 people	<input type="checkbox"/>
11 to 12 people	<input type="checkbox"/>
13 to 14 people	<input type="checkbox"/>
15 to 16 people	<input type="checkbox"/>
17 to 18 people	<input type="checkbox"/>
19 to 20 people	<input type="checkbox"/>



21 or more people	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

5. Apart from with your English class, how many times have you gone to the shops or market, either on your own, or without another person who speaks English, in the last week?
(Please ✓ one)

0 times	<input type="checkbox"/>
1 to 2 times	<input type="checkbox"/>
3 to 4 times	<input type="checkbox"/>
5 to 6 times	<input type="checkbox"/>
7 to 8 times	<input type="checkbox"/>
9 to 10 times	<input type="checkbox"/>
11 times or more	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

6. Apart from with your English class, how many times in the last week have you used a bus, train or tram, either on your own, or without another person who speaks English,?
(Please ✓ one)

0 times	<input type="checkbox"/>
1 to 2 times	<input type="checkbox"/>
3 to 4 times	<input type="checkbox"/>
5 to 6 times	<input type="checkbox"/>
7 to 8 times	<input type="checkbox"/>
9 to 10 times	<input type="checkbox"/>
11 times or more	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

7. Apart from with your English class, how many times in the last week have you gone to a park or playground, either on your own, or without another person who speaks English,?
(Please ✓ one)

0 times	<input type="checkbox"/>
---------	--------------------------

1 to 2 times	<input type="checkbox"/>
3 to 4 times	<input type="checkbox"/>
5 to 6 times	<input type="checkbox"/>
7 to 8 times	<input type="checkbox"/>
9 to 10 times	<input type="checkbox"/>
11 times or more	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

8. How confident are you to book an appointment in English with a doctor, dentist or nurse?
(Please ✓ one)

Very confident	<input type="checkbox"/>
Confident	<input type="checkbox"/>
Not confident	<input type="checkbox"/>
Not confident at all	<input type="checkbox"/>

9. Do you have any children who go to school?
(Please ✓ one)

Yes	<input type="checkbox"/> PLEASE ANSWER Q10
No	<input type="checkbox"/> PLEASE GO TO Q11

10. How confident are you to speak in English to people at your child's school?
(Please ✓ one)

Very confident	<input type="checkbox"/>
Confident	<input type="checkbox"/>
Not confident	<input type="checkbox"/>
Not confident at all	<input type="checkbox"/>

11. If you saw a crime taking place, how confident would you be to talk to the police about it?
(Please ✓ one)

Very confident	<input type="checkbox"/>
Confident	<input type="checkbox"/>

Not confident	<input type="checkbox"/>
Not confident at all	<input type="checkbox"/>

12. How much do you agree or disagree with the following statement?

♦ 'I feel I am free to decide for myself how to live my life'.

(Please ✓ one)

Agree strongly	<input type="checkbox"/>
Agree	<input type="checkbox"/>
Disagree	<input type="checkbox"/>
Disagree strongly	<input type="checkbox"/>

13. How much do you trust people in your family?

(Please ✓ one)

Trust completely	<input type="checkbox"/>
Trust somewhat	<input type="checkbox"/>
Do not trust very much	<input type="checkbox"/>
Do not trust at all	<input type="checkbox"/>

14. How much do you trust people in your local area?

(Please ✓ one)

Trust completely	<input type="checkbox"/>
Trust somewhat	<input type="checkbox"/>
Do not trust very much	<input type="checkbox"/>
Do not trust at all	<input type="checkbox"/>

15. How much do you trust people from a different country or religion?

(Please ✓ one)

Trust completely	<input type="checkbox"/>
Trust somewhat	<input type="checkbox"/>
Do not trust very much	<input type="checkbox"/>

Do not trust at all	<input type="checkbox"/>
---------------------	--------------------------

16. Do you think people from different countries or religions living in your local area: (Please ✓ one)	
Should mix less	<input type="checkbox"/>
Mix enough	<input type="checkbox"/>
Should mix more	<input type="checkbox"/>

17. How much do you feel part of your local area? (Please ✓ one)	
Completely	<input type="checkbox"/>
Somewhat	<input type="checkbox"/>
Not very much	<input type="checkbox"/>
Not at all	<input type="checkbox"/>

18. How much do you feel part of this country? (Please ✓ one)	
Completely	<input type="checkbox"/>
Somewhat	<input type="checkbox"/>
Not very much	<input type="checkbox"/>
Not at all	<input type="checkbox"/>

19. Are you registered to vote in elections in this country? (Please ✓ one)	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
20. Did you vote in the EU referendum on 23/6/2016? (Please ✓ one)	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

21. Did you vote in the local council elections on 5/5/2016? (Please ✓ one)	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

22. Have you done anything to improve your English since 22/4/2016? (Please ✓ one)	
Yes	<input type="checkbox"/> PLEASE SPECIFY
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

23. How interested are you in doing more English language courses in the next six months? (Please ✓ one)	
Not at all interested	
Not interested	
Interested	
Very interested	

24. How interested are you in doing employment skills training in the next six months? (Please ✓ one)	
Not at all interested	
Not interested	
Interested	
Very interested	
25. How interested are you in finding a paid job in the next six months? (Please ✓ one)	
Not at all interested	
Not interested	
Interested	
Very interested	



26. How interested are you in volunteering in the next six months (Please ✓ one)	
Not at all interested	
Not interested	
Interested	
Very interested	

27. How interested are you in doing digital/computer training in the next six months? (Please ✓ one)	
Not at all interested	
Not interested	
Interested	
Very interested	

28. Are you interested in doing anything else in the next six months that has not been mentioned above? If yes, please specify?

Annex 2: Copy of randomisation code

Code for cluster randomisation in R

```
# This code performs uniform cluster randomisation, based on an original csv data file that contains
# within-cluster observations (i.e. units of observation within clusters on each row), and unique cluster
# identifiers
# -----

# Set the working directory
setwd("C:\\Users\\Documents\\Team_Research\\Code\\R\\randomisation")

# Set the number of arms into which each cluster will be randomly allocated
arms <- 2

# Read in the csv file that includes observations within cluster
data <- read.csv(file="cluster template data.csv", stringsAsFactors=FALSE)

View(data)

# This csv file must include a column called "cluster_id"; otherwise, rename the column using the following,
# where "varname" is the name of the column that contains the cluster IDs:
#names(data)[names(data)=="varname"] <- "cluster_id"

# The following defines the function used for random assignment. The random allocation is performed
# uniformly over
# the number of arms specified. Note that the initial random number generated in this function (a) is
# distributed
# over a set of numbers that is one greater than the number of arms. This is done to avoid the extreme
# arm
# allocations (0 and 'max') having half the probability of occurring during rounding. The second line then
# reallocates
# both extremes into one allocation to ensure an even probability distribution.

randomise <- function(x){
  a <- round(runif(1, min=0, max=arms), digits=0)
  return(ifelse(a==0,arms,a))
}

# Each unique cluster_id is assigned a random allocation number
clusters <- unique(data$cluster_id)
cluster_assignments <- sapply(clusters, randomise)

# Finally, these random numbers are then merged back onto the original data structure based on cluster_id
data$arm <- sapply(data$cluster_id, function(x){
  return(cluster_assignments[clusters==x])
})

#Flatten data in case there are inconsistencies
data <- vapply(data, paste, collapse = ", ", character(1L))

# We then write the results to a new file (make sure not to overwrite the original)
write.table(x=data, file="randomised_data.csv", col.names = TRUE, row.names=TRUE)
```



Annex 3: Copy of monitoring data questions

Part One: Learner registration form

(TO BE KEPT BY CONSORTIUM PARTNERS)

Name	
Address	
Phone Number	
Date of Birth	__ __ / __ __ / __ __ __ __ (day / month / year)

Part Two: Learner registration form

(SEND TO BMG RESEARCH)

Name of centre		
<u>Manchester</u>		
Woodville Surestart Centre	<input type="checkbox"/>	1
FAST	<input type="checkbox"/>	2
Levenshulme Inspire	<input type="checkbox"/>	3
Bangladeshi Women's Organisation	<input type="checkbox"/>	4
Northmoor Community Centre	<input type="checkbox"/>	5
The Place at Platt Lane	<input type="checkbox"/>	6
Sacred Heart Surestart Centre	<input type="checkbox"/>	7
<u>Rochdale</u>		
Castelmere Community Centre	<input type="checkbox"/>	8
Wardleworth Community Centre	<input type="checkbox"/>	9
<u>Oldham</u>		
Holy Trinity Church	<input type="checkbox"/>	10
Coldhurst Children's Centre	<input type="checkbox"/>	11
<u>Bradford</u>		
Meridian Centre	<input type="checkbox"/>	12
Millan Centre	<input type="checkbox"/>	13
QED	<input type="checkbox"/>	14
Womenzone	<input type="checkbox"/>	15
All Saints Primary School	<input type="checkbox"/>	16

	<div> <div>Dixons Marchbank Primary School</div> <div><input type="checkbox"/> 17</div> </div> <div> <div><u>Kirklees</u></div> </div> <div> <div>Ravensthorpe Community Centre</div> <div><input type="checkbox"/> 18</div> </div> <div> <div>Thorhill Lees</div> <div><input type="checkbox"/> 19</div> </div> <div> <div>Thornton Lodge Community Centre</div> <div><input type="checkbox"/> 20</div> </div> <div> <div>Paddock Community Trust</div> <div><input type="checkbox"/> 21</div> </div> <div> <div>Other (please state name and location):</div> <div><input type="checkbox"/> 22</div> </div>
Gender	<div> <div>Female</div> <div><input checked="" type="checkbox"/> 1</div> </div> <div> <div>Male</div> <div><input type="checkbox"/> 2</div> </div>
Date of Birth	<div> <div>□□ / □□ / □□□□ (day / month / year)</div> </div>
Country of birth and year of arrival in UK	<div> <div>Country of birth: _____</div> <div>Date of arrival in UK : □□ / □□□□ (month/year)</div> </div>
Marital Status	<div> <div>Single</div> <div><input checked="" type="checkbox"/> 1</div> </div> <div> <div>Married</div> <div><input type="checkbox"/> 2</div> </div> <div> <div>Divorced</div> <div><input type="checkbox"/> 3</div> </div> <div> <div>Separated</div> <div><input type="checkbox"/> 4</div> </div> <div> <div>Widowed</div> <div><input type="checkbox"/> 5</div> </div>
Ethnicity	<div> <div><u>White</u></div> </div>



English/Welsh/Scottish/Northern Irish/British

☒ 1

Irish

☐ 2

Gypsy or Irish Traveller

☐ 3

Other White background, please describe

☐ 4

Mixed/Multiple ethnic groups

White and Black Caribbean

☒ 5

White and Black African

☐ 6

White and Asian

☐ 7

Other Mixed/Multiple ethnic background, please describe

☐ 8

Asian/Asian British

Indian

☒ 9

Pakistani

☐ 10

Bangladeshi

☐ 11

Chinese

☐ 12

Other Asian background, please describe

☐ 13

Black/ African/ Caribbean/ Black British

African

☒ 14

Caribbean

☐ 15

	<div>Somali <input type="checkbox"/> 16</div> <div>Other Black/ African/ Caribbean background, please describe <input type="checkbox"/> 17</div> <div>_____</div>
	<p>Other ethnic group</p> <div>Arab <input checked="" type="checkbox"/> 18</div> <div>Any other ethnic group, please describe <input type="checkbox"/> 19</div> <div>_____</div>
Religion	<div>No religion <input checked="" type="checkbox"/> 1</div> <div>Christian <input type="checkbox"/> 2</div> <div>Buddhist <input type="checkbox"/> 3</div> <div>Hindu <input type="checkbox"/> 4</div> <div>Jewish <input type="checkbox"/> 5</div> <div>Muslim <input type="checkbox"/> 6</div> <div>Sikh <input type="checkbox"/> 7</div> <div>Any other religion <input type="checkbox"/> 8</div> <div>Religion not stated <input type="checkbox"/> 9</div>
Number of children	<div>Total <input type="checkbox"/><input type="checkbox"/> Under 18 <input type="checkbox"/><input type="checkbox"/> Under 5 <input type="checkbox"/><input type="checkbox"/></div>
Economic / Employment status	<div>Economically active <input type="checkbox"/></div> <div>Employed full-time (including self-employed) <input type="checkbox"/> 1</div> <div>Employed part-time (including self-employed) <input type="checkbox"/> 2</div> <div>Unemployed (jobless, but <u>have</u> been actively seeking <input type="checkbox"/> 3</div>

	<p>work in the past four weeks and are available to start work in the next two weeks, OR are out of work, but have found a job and are waiting to start in the next two weeks)</p> <p><u>Economically inactive</u></p> <p>Unemployed (jobless, and have <u>not</u> actively sought work in the last four weeks OR are not available to start work in the next two weeks) <input type="checkbox"/> 4</p> <p>Full-time student (those either at school full-time, on a sandwich course, or in full-time university or college education) <input type="checkbox"/> 5</p> <p>Looking after home or family <input type="checkbox"/> 6</p> <p>Long-term sick or disabled <input type="checkbox"/> 7</p> <p>Retired <input type="checkbox"/> 8</p> <p>Other <input type="checkbox"/> 9</p>
Highest education level	<p>No formal education <input checked="" type="checkbox"/> 1</p> <p>Primary school level (up to age 11) <input type="checkbox"/> 2</p> <p>Secondary school level (up to age 16) <input type="checkbox"/> 3</p> <p>College/FE/Sixth form level (up to 18) <input type="checkbox"/> 4</p> <p>University level (aged 18+) <input type="checkbox"/> 5</p> <p>Post university qualification <input type="checkbox"/> 6</p>
Motivation	<p>To get work Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2</p> <p>To help/support my children Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2</p> <p>To improve their confidence to talk to other people Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2</p> <p>To prepare for further study Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2</p>

	Other _____																
Did you sign up to the English language class with someone you knew or a friend?	<div> <div>Yes <input checked="" type="checkbox"/> 1</div> <div>No <input type="checkbox"/> 2</div> </div> <p>If yes, please provide the first name(s) and learner ID of those you have joined with:</p> <table border="1"> <thead> <tr> <th>First name</th><th>LEARNER ID</th></tr> </thead> <tbody> <tr> <td></td><td>9 9 3 4</td></tr> <tr> <td></td><td>9 9 3 4</td></tr> <tr> <td></td><td>9 9 3 4</td></tr> <tr> <td></td><td>9 9 3 4</td></tr> <tr> <td></td><td>9 9 3 4</td></tr> <tr> <td></td><td>9 9 3 4</td></tr> <tr> <td></td><td>9 9 3 4</td></tr> </tbody> </table> <p>CENTRE STAFF TO ADD THE LEARNER ID NUMBER OF JOINT SIGN-UPS</p>	First name	LEARNER ID		9 9 3 4		9 9 3 4		9 9 3 4		9 9 3 4		9 9 3 4		9 9 3 4		9 9 3 4
	First name	LEARNER ID															
		9 9 3 4															
		9 9 3 4															
	9 9 3 4																
	9 9 3 4																
	9 9 3 4																
	9 9 3 4																
	9 9 3 4																
Native language	<p>What is your first language (mother tongue)? _____</p> <p>Can you read in this language?</p> <div> <div>Yes <input checked="" type="checkbox"/> 1</div> <div>No <input type="checkbox"/> 2</div> </div>																
	<p>Other languages</p> <p>What other languages can you speak (if any)? _____</p> <p>Can you read in this/these languages?</p> <div> <div>Yes <input checked="" type="checkbox"/> 1</div> </div>																



No

☐

2

(If yes, specify which)

I confirm all the information provided on this registration form is correct.

Learner signature:

Date:

Annex 4: Copy of consent form

Learner Information Sheet

Dear Learner,

Talk English is working with the **Ministry of Housing, Communities and Local Government** (MHCLG) to provide **Talk English Together** ESOL.

Some researchers (BMG research and the Learning and Work Institute) want to find out if ESOL classes help make your life better.

To join a Talk English Together class, you need to complete a registration form and a short survey, and take an English language assessment at the start and end of the course. This information and details about you will be shared with BMG, L&W and MHCLG for the research only.

MHCLG will publish a report to share what we have learned. We will guarantee that it is not possible to identify you from this data and all of your information will be kept confidential and secure.

We hope that you are happy to do this. If you are happy to continue, please fill out the consent form.

If you do not want to take part, then that is fine. But this course is only open to those who agree to take part in this research.

We are happy to answer any questions you might have.

Thank you!

Talk English Together

Learner Consent Form

I have read the Learner Information Sheet, or it has been read to me. I understand that I can choose whether to continue or not, but that I can only attend this English language course if I take part in this research. I am happy to complete the registration form, surveys and English language assessments. I am happy for my answers to be shared with BMG Research, L&W and MHCLG for research purposes, and for the findings of the research to be published in a report. I understand that I will not be personally identified in any report produced.

By completing the details below, I freely give my consent to participate in this research and enrol on the Talk English programme.

To be completed by the learner:

PRINT FULL NAME

Signature

Date

Annex 5: Marking Schema for English Language Test

Table 1. Learner scoring guide						
	Part 1: Speaking & Listening		Part 2: Reading		Part 3: Writing	
Pre-entry level	Learner profile	Score	Learner profile	Score	Learner profile	Score
	Non-completer	0	Non-completer	0	Non-completer	0
	Emerging skills	1	Emerging skills	1	Emerging skills	1
	Satisfactory skills	2	Consolidating skills	2	Consolidating skills	2
	Good skills	3	Established skills	3	Established skills	3
Entry Level 1	Learner profile	Score	Learner profile	Score	Learner profile	Score
	Non-completer	0	Non-completer	0	Non-completer	0
	Emerging skills	4	Emerging skills	4	Emerging skills	4
	Consolidating skills	5	Consolidating skills	5	Consolidating skills	5
	Established skills	6	Established skills	6	Established skills	6
Entry Level 2	Learner profile	Score	Learner profile	Score	Learner profile	Score
	Non-completer	0	Non-completer	0	Non-completer	0
	Emerging skills	7	Emerging skills	7	Emerging skills	7
	Consolidating skills	8	Consolidating skills	8	Consolidating skills	8
	Established skills	9	Established skills	9	Established skills	9
	Learner's highest score for speaking & listening =		Learner's highest score for writing =		Learner's highest score for reading =	
Learner's Total Score = (adding together the learner's highest score for each of the three parts)						