
Update:

Following completion of the Phase 1 study, the retreat and the development of a new logic model, several updates have been made to the protocol.

- Page 2: We have re-framed the research questions under three headings, exploring evidence to support: 1. Theory of change; 2. Theory of intervention; and 3. Implementation factors. The research questions largely remain the same, but this has resulted in the inclusion of 1 additional research question looking at the theory of intervention.
- Page 3: Interviews with the 'delivery team' has been deleted. This was included in the original protocol in error. Additionally, the original protocol highlighted that measurement tools would be piloted with Year 5 pupils; however, piloting was completed with Year 4 pupils.
- Page 4: Phase 1 has now been completed and details of the Phase 1 study have been added. This includes information on the pupil outcome measures which were piloted, as well as some detail on the focus groups with pupils, teacher interviews and classroom observations. Table 2 outlines the areas of interest and the research methods used to investigate them.
- Page 4: Details of the retreat, which was held in June 2016, have been added. This involved input from: the research team; the Positive Action team; one head teacher; Prof Chris Bonell (London School of Hygiene and Tropical Medicine) and EEF. This retreat facilitated the development of the new logic model (figure 1).
- Page 5: The emerging Positive Action Logic Model from phase 1 has been included (figure 1). The programme currently proposes a holistic theory of change with all outcomes simultaneously supporting the development of each other. This will be tested in the analysis of phase 2 data an exploring potential hierarchy's in outcome change. The model also includes the inputs, outputs, outcomes being explored in this study of the Positive Action programme. Analysis of these factors will explore the programme's theory of intervention. Specifically, if classroom activity and whole school activities are having differential relationships with particular outcomes. Lastly, implementation factors are also included in the model. These factors will be used in an implementation study exploring their relationship to outcome change.
- Page 6: The pupil outcome measure has been developed, following the Phase 1 pilot study. The items used are derived from previously published standardized measures which are detailed in Table 3. This measure has been used during the October 2016 pre-test (n=480 pupils). This took approximately 25 minutes for classes to complete.
- Page 7: The teacher implementation survey has been finalised and this has been sent out to all Year 5 teachers in the study.
- Page 7. Detail on the proposed statistical analyses has been inserted, which mirrors the components of the logic model presented in figure 1 and described above regarding page 5. Note that each of the outcomes are, at this point, considered co-dependant, concurrent and equal. Therefore, they are all primary outcomes. However, final correlational analysis of change in the three outcomes may suggest re-interpretation of the programmes theory of change.
- Page 7/8: Following university restructuring, the affiliation of the QUB team members has been changed from the Centre for Effective Education to the Centre for Evidence and Social Innovation.
- Page 8: Interviews with teachers and Head-teachers will also explore views on programmes impact on attainment.

- Page 9: All activities on the timeline up to October 2016 have now been completed and the timeline has been updated to this effect. Development of the pupil post-test satisfaction survey and the climate questionnaire will be completed before December 2016, as highlighted in the updated timeline.

Evaluation Summary

Age range	1 cohort from mid year 4 through to end of year five
Number of pupils	Approx. 600
Number of schools	15

Intervention

Positive Action Programme, which is an evidence based comprehensive Social-Emotional and Character Development (SECD) program that includes a school-wide climate change component together with a sequenced curriculum that are delivered to all student levels.

The Positive Action program is an approach to teaching positive actions/behaviours for the whole self: the physical, intellectual, social and emotional. It teaches positive actions for all ages in schools—reception through high school—through age-appropriate lesson manuals. Positive Action aims to promote character development, academic achievement, and social-emotional skills and to reduce disruptive and problem behaviour.

This project is a two phase implementation study of Positive Action. The first phase explores initial reactions to the programme over 6 months. The second phase explores implementation factors that have a relationship with any observed outcome change during a full school year of the programme.

Research questions

Questions the project is designed to answer.

1. Evidence to support the theory of change

What does the literature say about theory of change underpinning positive action? (Review prepared during Phase 1).

What is the logic model for the Positive action programme in the UK? (Developed at the end of Phase 1)

What reliable, valid and usable outcome measures overlap best the Positive Action logic model (primary and secondary outcomes)? (Assessed at the end of Phase 1)

Did project data support the pathways in the programme logic model? (Assessed at the end of Phase 2)

2. Evidence to support theory of Intervention

Is there a distinction between the relationship between whole school and classroom activity on outcome change (Phase 2)

3. Implementation Study

a) Feasibility

Was the Positive Action programme implemented adequately over the trial period? (Assessed at the end of Phase 2.)

What were the major programme adaptations required? (Assessed at the end of Phase 1 and Phase 2)

b) Readiness for trial

What implementation factors (e.g. exposure, engagement, fidelity, and delivery quality) influenced outcome change? (Assessed at the end of Phase 2)

Were important implementation factors a risk to scaling up for efficacy trial? (Assessed at the end of Phase 2)

Methods

Recruitment

15 primary schools will be recruited through the delivery team's network of schools in Kent.

All pupils and teachers in year 4 will be included in the study and followed for 1.5 years to the end of year 5. Opt out consent will be sought for parents to withdraw their child's data from the study.

Data collection

The pilot will be run over 2 phases. The first phase of the pilot would run from January 2016 to June 2016 and will give the delivery team a chance to embed Positive Action in schools. It will also provide an opportunity to check the feasibility and acceptability of the programme in a UK context. During this period QUB will trial a range of measures and develop a programme logic model. The second phase of the pilot will begin in September 2016 and end in Sep 2017. It will be focused on collecting quantitative data on outcome measures and implementation factors. The implementation data will be related to outcome change in order to assess the key implementation factors and re-evaluate the programme logic model.

Phase 1 (pilot implementation)

Data will be gathered on several key areas of interest including: training processes; school climate; heads' attitude to PHSE; pupil exposure to the programme; engagement and enjoyment; teacher adaptations and displacement (i.e., other PHSE instruction that is removed, duplicates or conflicts with the programme). This will mainly be done through interviews, classroom observations, and focus groups with school staff and students. Observations will be conducted in at least one class in the 15 schools. In addition, there will be a sample from five different schools, where one group of students, one teacher and the school leader will be interviewed about the early phase implementation of the programme.

Several measurement tools will be piloted with groups of Year 4 children and teachers in four schools, specifically exploring ease of administration and usability of these measures. A range of character measures (across a wide range of domains) will be considered, drawing on those used in previous PA research, and those used by CEE in other similar research projects (see examples in Table 1).

Table 1: Potential character measures

Outcome	Potential measures	Previously used by CEE
Behaviour	Cited in previous PA research	Previously used by CEE Child behaviour checklist - Child, teacher and parent versions available) (Achenback, 2008)
	Normative beliefs about aggression scale - Child report (Huesman et al., 1997)	
	Aggression scale – Child report (Orpinas & Frankowski, 2001)	
	Behaviour Assessment System for Children (2) - child, teacher and parent ratings available (Reynolds & Kamphaus, 2004)	

Affect/ wellbeing	Child problem behaviour scale PANAS (Watson et al., 1988) – Child report	Kidscreen-10 – Child report (Kidscreen group, 2006)
	Student life satisfaction – Child report (Huebner, 1991)	
Emotional and character development	Child SECD scale – Child report (Ji et al., 2013)	Self Description Questionnaire (Marsh, 1992)
Self Regulation		Child Self-Control Rating scale (Rorhbeck et al. 1991) ; (Child Trends, 2014)

All phase 1 data will also feed into a retreat focused on refining the programme logic model and informing programme/ teacher training adaptations required for implementation in UK schools. A logic model will be generated through a stakeholder meeting involving the research team, delivery team, head-teachers and year 5 teachers. This logic modelling process will be facilitated by the study's Principal investigator (Dr Liam O'Hare). After completion of the logic model a decision on which tools to be used in Phase 2 will be made by the evaluators, Positive Action, and the EEF by the 1st September 2016. The protocol will be updated at this time to reflect this.

Update October 2016

Data were gathered on the key areas of interest noted above using a variety of methods. In particular, these included: observations and open ended evaluation surveys administered during both teacher training sessions; classroom observations across all 15 schools; pilot administration of the visitor perception form; pilot administration of the child outcome measures; in-depth interviews and focus groups in 4 schools, resulting in 5 pupil focus groups, involving 25 children, 4 teacher interviews and head teacher interviews. Table 2 below highlights each key area of interest under investigation, mapped to the methods of data collection.

Table 2: Areas under investigation and research methods employed

Key area of interest	Method of data collection
Training processes	Observations/ evaluation forms (administered during both training sessions)
School climate	Visitor perception form piloted – a new bespoke climate questionnaire will be administered during Phase 2
Heads' attitude to PHSE	Interviews with Head Teachers
Pupil exposure to the programme	Interviews/ focus groups/ piloting of teacher implementation reports
Engagement and enjoyment	Interviews/ focus groups/ classroom observations
Teacher adaptations and displacement	Piloting of teacher implementation reports

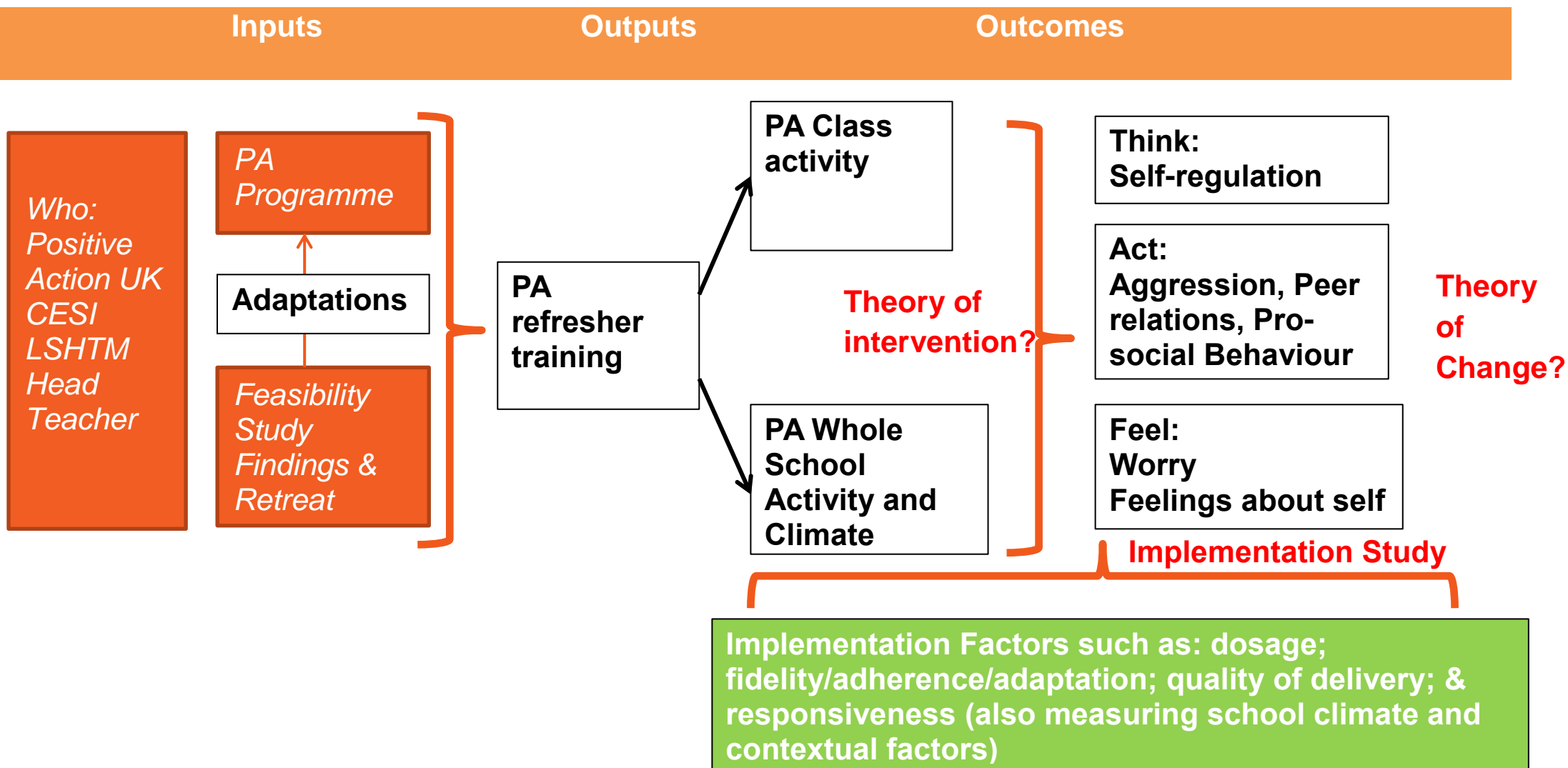
Additionally, a range of child outcome measures were piloted with Year 4 pupils in 4 different schools (n=100), these were:

- The 'Core' survey, as used in previous Positive Action research, this covered a range of different measures, related to 'think, act, feel.
- Additionally, a self-regulation measure (Rorhbeck et al., 1991) was also administered.

Finally, a retreat was held in June 2016. This involved input from: the research team; the Positive Action team; one head teacher; Prof Chris Bonell (London School of Hygiene and Tropical Medicine)

and EEF. During this retreat, several topics were discussed, in particular: key findings from Phase 1; the measurement tools for Phase 2; potential programme adaptations/ teacher training adaptations; and the programme logic model (including outcomes activities and implementation factors). The logic model developed during this meeting is displayed in figure 1.

Figure 1 Emerging Positive Action Logic Model from phase 1



Phase 2 (implementation study)

This phase of the study will explore the feasibility of a full year implementation of the programme. The implementation information (gathered from pupils and teachers) will be directly related to outcome change thus providing an indication of readiness for trial. All of this information will be fed into a further revision of the programme logic model.

Outcome Data: Year 4 pupils from Phase 1 of the pilot will now be in year 5 and followed throughout that year. Pupils will complete a questionnaire measuring pupil character outcomes at both the beginning (Sep 2016) and end of the year (June 2017 - i.e., pre and post-test questionnaires). The outcome measures included will be decided after the completion of phase 1 by 1st September 2016. The protocol will be updated at this time to reflect this.

Implementation Data: Pupils will also complete a post-test implementation/satisfaction questionnaire (adapted from relevant scales for example 'Client Satisfaction Questionnaire' (CSQ-8) Larsen et al, 1979); 'My Class Inventory' Fisher and Fraser, 1981 and 'Facilitator Disposition Checklist' O'Hare et al, 2010). In addition, all Year 5 teachers will complete short end of unit implementation reports throughout the school year (adapted from relevant scales for example 'PA weekly implementation report' by Beets et al., 2008 and informed by the implementation study), incorporating also a cost capture assessment (during the final implementation report). The implementation measures included will be decided after the completion of phase 1 by 1st September 2016. The protocol will be updated at this time to reflect this.

Again, all 15 schools will be visited at least once for further process data collection. In each school there will be one observation, the research team will also repeat the five focus groups with pupils, five interviews with teachers and five interviews with school leaders about the overall implementation of the programme at the end of the school year. Interviews will also explore perceptions of programmes impact on attainment.

Queen's university will collect all study data.

Update

Outcome data: The final outcome measures used are presented in Table 3 below. These measures were pre-tested with 480 Year 5 children from across the 15 schools during October 2016.

Table 3: Outcome measures

Original Standardized measure	Outcome Area covered	Number of items
Child self-control rating scale (CSCRS, Rohrbeck et al., 1991)	"THINK" - Self-regulation	33
The Aggression Scale: A self-report measure of aggressive behavior for young adolescents (Orpinas & Frankowski, 2001)	"ACT" - Aggressive behaviours	10
Mate-Tricks Pro-social behavior questionnaire (O'Hare et al., 2012)	"ACT" - Combination of two questionnaires:	12

	<ol style="list-style-type: none"> 1. The peer relations questionnaire (PRQ, Rigby and Slee, 1993). This encompasses subscales of: <ol style="list-style-type: none"> a. Bullying b. Victimisation 2. Pro-social behaviour 	
Penn State Worry Questionnaire for Children (PSWQ-C, Chorpita et al., 1997)	<p>"FEEL"</p> <ul style="list-style-type: none"> - Worry and anxiety 	14
KIDSCREEN-52 – Health Questionnaire for Children and Young People (Ravens-Sieberer et al., 2003)	<p>"FEEL"</p> <ul style="list-style-type: none"> - Feelings about self and life 	6

Implementation Data: The teacher end of unit implementation reports are now finalised and were informed by previously used Positive Action implementation reports and the implementation study. This survey is now hosted online and available for teachers to populate at the completion of each of the Positive Action units. The pupil post-test implementation satisfaction questionnaire, as well as a school climate questionnaire are currently under development (these will be required for 2017).

Statistical Analysis:

Theory of change: This will be explored by looking at the correlations between pre-and post-test change on the three outcome domains of think act and feel.

Theory of intervention: This will explore the relationship between classroom activity and whole school activity on the theorised programme outcomes. A regression model will be used with outcomes as the dependant variable and whole school and class room activity as the independent variables.

Implementation study: This analysis will produce regression models of the relationship between implementation factors (independent variables) and outcome change (dependant variables).

Ethics and registration

Ethics will be applied for through QUB School of Education Ethics Committee. The ethics will request that parents are provided consent forms to opt their child's data out of analysis. Opt in parental consent will be collected for any pupil's inclusion in focus groups.

Personnel

The project team, **Positive Action UK** will:

- Deliver the Positive Action programme kits (teacher's Instructor's Kits and the primary Climate Development Kit) to the schools prior to training
- Deliver 1 day training in the week beginning of 18th January 2016. The program will begin February 1, 2015
- Be the first point of contact for any questions about the evaluation and implementation
- Provide on-going support to the school
- Provide half day workshop every other term
- Send out regular updates on the progress of the project through a newsletter

The research team, **Queens University, Belfast & IOE** will:

- Conduct the data collection

- Analyse all the data from the project
- Ensure all staff carrying out assessments are trained and have received CRB clearance
- Disseminate research findings

The team will include:

Liam O'Hare (LO, QUB): Dr Liam O'Hare, Senior Research Fellow in the Centre for Evidence and Social Innovation at Queen's University Belfast. As Principal Investigator in the study Liam will have overall responsibility for efficient delivery of the project on time and in budget and leading the production of the final report.

Andy Biggart (AB, QUB): Dr Andy Biggart, Fellow of Centre for Evidence and Social Innovation (Programme Lead on Academic Attainment). Andy, will lead on the ethics and analysis aspects of the project.

Karen Orr (KO, QUB): Dr Karen Orr is a Research Fellow with the Centre for Evidence and Social Innovation at Queen's University Belfast. Karen will act as trial manager on the project and work closely with the RA, managing the day-to-day activity of the trial and liaising closely with the PI to ensure the project remains on track.

Patrick Stark (PS, QUB): Dr Patrick Stark is a researcher for the Centre for Evidence and Social Innovation at Queen's University Belfast. Patrick will conduct data collection and data management for the project.

Chris Bonell (CB, IOE): Chris Bonell is a Professor of Sociology and Social Policy at London School of Hygiene and Tropical Medicine. Chris will advise on logic modelling, trial design, and interpretation of findings.

The School will:

- Consent to participate in the pilot for the entire period and allow time for:
 - Teachers to deliver the age-appropriate curriculum given to them by teaching a complete 15-minute lesson at least three times per week.
 - The entire school personnel: administration and support staff will participate in the school climate activities contained in the Elementary Climate Development Kit.
- Allow time for each testing phase and liaise with the evaluation team to find appropriate dates and times for testing to take place
- Release staff so that they can attend the initial training session and the workshops
- Allow teachers time to complete implementation reports.
- Ensure the shared understanding and support of all school staff for to the project and personnel involved.
- Distribute research consent forms to parents/carers.
- Be a point of contact for parents / carers seeking more information on the project.

Risks

A risk analysis of School of Education and CEE activity has been undertaken establishing the potential risks to the funder and the controls and contingency measures that are in place to minimise these risks (available on request). One of the major benefits of EEF funding this proposed evaluation are the extensive experience, strong controls and contingency measures that Queen's University of Belfast will be able to provide. This adds security to the funding body and peace of mind that the proposal will be delivered on specification and on-time.

Timeline

Date	Phase	Activity	Responsible	Completed
Nov 2015 – Aug 2016 Phase1: Pilot study				
Nov 15 - Jan 16	Set-up	<ul style="list-style-type: none"> Ethics application QUB school of Education School recruitment (for all schools across both stages of the research) Establish schools Memorandum of Understanding (again for all schools across both stages of the research) Consent process Initial school training Observe training 	QUB Delivery Team (DT) QUB & DT QUB QUB DT QUB	All completed
Feb – Mar 16	Data collection	<ul style="list-style-type: none"> Literature review of the Positive Action programme (implementation, efficacy and measures audit) 1 site visit to each school <ul style="list-style-type: none"> Classroom observations (15) Teacher interviews (5) Pupil focus group (5) Leadership interviews (5) Measurement testing (4 schools) 	QUB	All completed
Apr - May 16	Data analysis	<ul style="list-style-type: none"> Data analysis and interpretation 	QUB	Completed
Jun 16	Retreat	<ul style="list-style-type: none"> Logic model development and review Programme adaptations/Teacher training adaptations 	QUB + IOE, DT & School Stakeholders	Logic model development began during the retreat –finalised version (see figure 1)
2016/2017 Phase 2: Implementation study				
July/August 2016		Trial planning, capturing the learning from the pilot study: <ul style="list-style-type: none"> Finalising outcome measures (including Self-regulation) Adaptation to teacher training 	QUB	All completed
August/ Sep 2016		Set up with schools: <ul style="list-style-type: none"> Reminder of schools Memorandum of Understanding Obtaining consent 	PA QUB	Completed Consent obtained
Sep/ Oct 2016	Pre-testing	<ul style="list-style-type: none"> Pre-testing outcomes in 15 schools Provide refresher training to 15 schools Observe training 	QUB DT QUB	All completed
Sep/ Dec 2016		Development of: <ul style="list-style-type: none"> Teacher implementation report Climate questionnaire Pupil post-test satisfaction measure 	QUB	Teacher implementation finalised, others underway

Sep/Jun 2016/2017	Implement study: all teachers	<ul style="list-style-type: none"> Administration of teacher implementation questionnaire at the end of each unit) 	QUB	Implementation report available online and link delivered to teachers
Jan/Feb 2017	Process evaluation	Site visits at sub-sample classes <ul style="list-style-type: none"> Classroom observations (15) Teacher interviews (5) Pupil focus groups (5) School leader interviews (5) 	QUB QUB QUB	
May/Jun 2017	Post-testing	Post-testing outcomes in 15 schools Post-test pupil implementation questionnaire	QUB	
Aug/Sep 2017	Data analysis Review report	<ul style="list-style-type: none"> Data analysis and interpretation Report writing Review logic model 	QUB + IOE QUB + IOE	
Sep/ Oct 2017	Review & Finalise	<ul style="list-style-type: none"> Review report Final report submitted Data Archiving 	QUB	