

Evidence Development and Incubation Team



RedSTART: Change the Game Evaluation Year 1

Full Report

Prepared by the Policy Institute at King's College London

Susannah Hume Jack Lawton-Summers Gabrielle McGannon Megan Liskey Veronica Soon Johnny Runge

Version 2 - October 2024



Thanks and acknowledgements

We would like to thank the staff at every participating school for their hard work and flexibility shown throughout the research process; their collaboration has been central to its success.

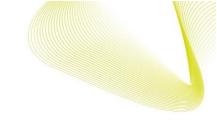
We are also grateful for the commitment of the RedSTART team to the research and want to highlight their vital roles in facilitating this work – we could not have completed the evaluation activities without various additional tasks they have completed. We want to particularly thank Sarah Marks, CEO of RedSTART, who recognised the value of robust evaluation, and has worked tirelessly with her team to ensure we were able to conduct this research to the highest standards of rigour. We also wish to acknowledge RedSTART Chair Rhodri Mason and the RedSTART Board of Directors for their role in developing the charity's strategy and approach to evaluation.

We are grateful to Professor Michael Sanders, Dr Chiamaka Nwosu, Beti Baraki, Hannah Piggott, and Domenica Avila for stepping in at various points and providing support to this research.

We have also valued the advice and support we have received from Charlotte Turner of Bean Research, and researchers at the Money and Pensions Service (MaPS) and Loughborough University.

Table of Contents

1	Executive Summary	3
2	Introduction	8
3	Change the Game	11
4	Impact evaluation	16
5	The study sample	20
6	Findings	23
7	Implementation and process evaluation	33
8	Discussion of findings	52
9	Conclusion	56
10	Next steps	57



1 Executive Summary

1.1 Headlines

In the first year of our evaluation of the RedSTART: Change the Game financial literacy intervention, 45 schools and over 3,500 students in Years 2 and 3 (England) and Primary 3 and 4 (Scotland)¹ participated in the impact evaluation. The evaluation was a randomised controlled trial (RCT), with students in the treatment schools receiving Change the Game activities through the school year whilst the control cohort did not.

The impact evaluation found that Change the Game had a statistically significant positive effect on children's financial knowledge, as measured by a nine-item survey scale, with treatment pupils scoring 3.5% higher, all else equal. It also found that the programme had a statistically significant impact on two out of four disaggregated outcomes: pupils' financial mindset and financial connection were improved by the intervention. No significant effect was found on the other two disaggregated outcomes, financial ability and financial behaviour, or on teacher-assessed maths attainment.

The implementation and process evaluation found that there was widespread buy-in to the programme from stakeholders. Teaching staff found the delivery model and resources to be high-quality, efficient, and relatively burden-free, indicating that the model could be sustainable and scaled.

1.2 The intervention

Change the Game is a novel financial education intervention for primary aged children, with activities delivered every year until the end of primary school. It was delivered in over 50 schools across the country in 2022/23. The delivery model is based around partnerships between RedSTART, schools, and volunteers, including from the financial sector. Together, they deliver game-based activities that introduce financial concepts and enable students to engage meaningfully with them. In the first year, the intervention consisted of three core parts:

- school-based activities delivered by teachers;
- workshops in schools delivered by volunteers and RedSTART staff;

¹ For brevity, we will only use English year group naming conventions from here onwards.

• ongoing support provided to teaching staff by RedSTART's regional managers.

A bank app is being rolled out to participating schools in the 2023/24 school year, in which pupils earn virtual money through maths games, manage their money in current and savings accounts, and spend them on real items in a physical shop.

1.3 The evaluation

Over 3,500 Year 2 and 3 students across 45 schools took part in the first year of the evaluation in the 2022/23 academic year. The impact evaluation, an RCT, has investigated the effect of Change the Game on pupils' financial knowledge. This approach was selected as, when they are completed to a high standard, RCTs provide robust causal evidence. The participating schools were randomly allocated into two groups – treatment and control – with the treatment schools receiving the intervention for Years 2 through 6 and the control schools only receiving the intervention in Year 6.

Year 2 and Year 3 students' financial knowledge was measured using a survey scale that was developed by the evaluation team for this research. Students completed the survey twice, either using a paper or online version: once before the intervention was delivered, and again afterwards. The average changes in these scores were compared between the treatment and control group to give an estimate of the effect created by the Change the Game programme.

Alongside the impact evaluation, we conducted an implementation and process evaluation (IPE) to understand how the programme is delivered, what factors have helped or hindered its implementation, and to answer broader questions around programme sustainability and scalability. Interviews and surveys were completed with school staff, and interviews were conducted with programme staff and volunteers who had supported programme delivery.

1.4 Findings

In this report we present preliminary analysis of the impact of Change the Game for the first year of delivery.

The impact evaluation found that Change the Game had a statistically significant positive effect on students' financial knowledge, as measured by a survey instrument developed for this research. After one year of exposure to the treatment (which is intended to be a multi-year intervention) the average score for treated pupils was 0.9, or 3.5 per cent, higher than control pupils.

The intervention also had statistically significant positive effects on two disaggregated outcomes. Pupils' financial mindset, and connection were improved, on average, by engaging

with Change the Game. No significant impact was found on financial ability or financial behaviours measured by the survey. We found no significant difference in teacher-assessed grades in maths between the treatment and control groups. Table 1, overleaf, summarises these findings.

The implementation and process evaluation found that the programme has strong support amongst all stakeholders. Teachers consistently indicated their satisfaction with RedSTART's resources, they found the year-round activities engaging and broadly accessible for students and were generally impressed with the contributions of volunteers and RedSTART staff.

The buy-in from volunteers and teachers, and the reported ease of delivery, suggests that the programme will be sustainable in the schools that currently work with RedSTART. In particular, the volunteer-based model was championed as an efficient way to enhance the learning activities (by improving the staff-student ratio). The model also introduces students to adults from varied walks of life they may not otherwise engage with.

The intervention is organised and facilitated by a small, committed and highly competent team of RedSTART staff. If the programme was to expand to many more schools in its current form, additional staffing would be necessary, or the team structure may need development.

The present version of the report presents updated analysis including demographic data provided through the National Pupil Database (NPD). Impact estimates only changed marginally when gender, ethnicity and eligibility for free school meals (FSM) were added to the model, increasing our confidence that the randomisation has been successful. Treatment effects appear broadly similar across demographic subgroups, suggesting that Change the Game has the same benefits for pupils from a range of backgrounds.

A potential limitation worth noting is that data was collected by teachers, rather than the research team, meaning there may be some variations in the conditions under which pupils completed the surveys. Nonetheless, we are confident that the first year of the trial has been completed robustly and that the reported effects represent the actual impact of the Change the Game intervention.

Outcome	Table 1: Summary of impact analysis findings Measure	Year 1 Impact	
	9 survey questions related to:		
Financial knowledge	 Understanding of role of money in society Understanding of money management Attitudes to money management Skills to manage money well day-to-day Aspirations and goals Access to financial education resources 	+3.5% Small-to-medium effect	
Financial ability	 2 survey questions related to: Understanding of money management Understanding of role of money in society 	No impact	
Financial behaviours	2 survey questions related to:Skills to manage money well day-to-day	No impact	
	1 survey question related to:	+5.5%	
inancial connection	• Access to financial education resources	Small effect	
	7 survey questions related to:		
	• Attitudes to money management	+2.3%	
Financial mindset	Confidence in maths skillsAspirations and goalsGeneral aspirations	Small effect	
Maths attainment	Teacher-assessed grades	No impact	

1.5 Conclusions

Based on our findings, we have come to the following conclusions that are relevant to policymakers and practitioners in the financial education field.

1. Children between the ages of six and eight can engage meaningfully with financial education and can benefit from interventions that aim to improve their financial knowledge. In particular, our findings indicate that game-based activities can improve students' understanding of financial concepts and impact their attitudes towards money and its role in society.

- 2. External organisations seeking to deliver programmes in schools should prioritise reducing burden for teaching and leadership staff as far as possible. Because of the wide range of competing priorities on staff and student time, buy-in among school staff is crucial to the successful delivery of school-based interventions.
- 3. Accessible resources and varied activities, such as those used by RedSTART, are linked to more time-efficient interventions; evidence gathered here suggests that lower intensity programmes can yield results that are comparable to higher intensity programmes.
- 4. Leveraging the interest that finance organisations have in financial education to embed corporate volunteers into a delivery model is a pragmatic approach to create a well-resourced, engaging intervention.

1.6 Next steps

The trial is moving into a second phase in 2024. A new cohort of students, who are currently in Reception, are being onboarded into the research following expansion of Change the Game's delivery. We have onboarded 17 new schools (and will include 3 schools that had initially been unable to participate in the first year), for a total of 65 participating schools. Going forward, we will track this cohort throughout their primary school years to measure the impact of Change the Game across multiple years. We will also continue to track the two cohorts who have participated in the first year of the evaluation, who will continue to take part in Change the Game activities, with further outcome measures taken when they reach the end of Year 4 and Year 6.

2 Introduction

This report details the first year of the evaluation of RedSTART's Change the Game programme – a financial education intervention for primary aged children. The evaluation has been completed by researchers at the Policy Institute at King's College London. This report will be the first of a series of annual reports as we aim to track the impact of Change the Game over the next seven years.

2.1 Context

The evaluation has taken place at a time when the importance of financial literacy has been laid bare by the cost-of-living crisis, as individuals across the UK are having to deal with difficult financial decisions in an increasingly complex financial environment. There is evidence that financial literacy is linked to the financial outcomes of adults, and that financial education received as a child affects financial capabilities later in life.²

However, financial education is not equally accessed, with the worst-off less likely to access it than their wealthier peers.³ School-based financial education varies considerably as schools are under little statutory obligation to provide meaningful financial education. Consequently, the young people that are growing up to face the greatest financial challenges are often the least well prepared to deal with them.

The corresponding evidence base is also patchy. There has been a range of work completed into the state of financial education in UK schools, but there is limited evidence on the long-term impacts of financial education delivered to primary-aged children. Meta-analyses show that financial education programmes can be effective at improving financial literacy but there is lack of meaningful knowledge about what works in UK primary schools.⁴

This context has driven the salience of financial education, with policymakers across the spectrum increasingly seeking to address the gap that exists in provision and other

² See, for example, Lusardi & Messy (2023), The importance of financial literacy and its impact on financial wellbeing. *Journal of Financial Literacy and Wellbeing*, 1(1) and LeBaron et al. (2020), Parental Financial Education During Childhood and Financial Behaviors of emerging adults, *Journal of Financial Counselling and Planning*

³ MaPS (2023), UK Children and Young People's Financial Wellbeing Survey: Financial Foundations, Available at: <u>https://maps.org.uk/en/publications/research/2023/uk-children-and-young-peoples-financial-wellbeing-survey-financial-foundations#Key-findings</u>

⁴ Kaiser, T., & Menkhoff, L. (2020). Financial education in schools: A meta-analysis of experimental studies. *Economics of Education Review*, 78.

organisations looking to grow the evidence base. The All-Party Parliamentary Group (APPG) on Financial Education for Young People has have recently published recommendations that seek to encourage the expansion of provision and evidence generation in the sector.⁵ Work by the Education Select Committee has also focused on the issue and launched an inquiry at the end of 2023 to strengthen financial education's presence in the national curriculum.⁶

RedSTART's mission is responsive to this context. Not only do they want to deliver financial education in economically deprived areas, but they also aim to contribute to the evidence base of what works in financial education. As such, they commissioned this research in 2022 with the aim of measuring the impact of their intervention on primary school pupils, and to provide a blueprint for how these initiatives can be scaled up, particularly in schools in lower-income areas with a higher proportion of disadvantaged pupils. As such, RedSTART's mission responds directly to the recommendation by the APPG on Financial Education for Young People in their 2021 report to invest in longitudinal studies.

2.2 The Evaluation

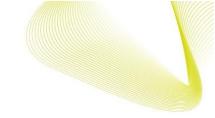
The RedSTART team agreed to facilitate an RCT; this method, when well-executed, can provide extremely robust causal evidence and is therefore well suited to their aims. Baseline and endline measures of financial knowledge were gathered in treatment and control schools via a survey, whilst further administrative data was collected from schools. These outcomes will be compared to estimate the causal impact of Change the Game.

Concurrently, we completed a range of qualitative data collection activities as part of an implementation and process evaluation (IPE). In these interviews and surveys, we asked teachers, volunteers, and delivery staff to explain how the programme had been delivered, what factors made this more or less difficult, what impacts they had observed, and their perceptions of the sustainability of the programme.

Taken together, we believe our evaluation and RedSTART's work can meaningfully contribute to the sector and play an important role in developing policy recommendations relating to best practice and delivery approaches.

⁵ APPG on Financial Education for Young People (2021), Inquiry on Primary-School aged Financial Education, Available at: <u>https://www.young-enterprise.org.uk/wp-content/uploads/2021/07/Inquiry-on-primary-school-aged-financial-education-Report.pdf</u>

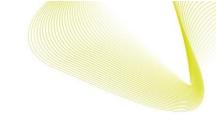
⁶https://committees.parliament.uk/committee/203/education-committee/news/198489/education-committee-launches-inquiry-into-strengthening-financial-education/



2.3 Report Structure

This report will follow the structure outlined below to explain the context of the research, our methodologies, and the findings of the first year of the evaluation.

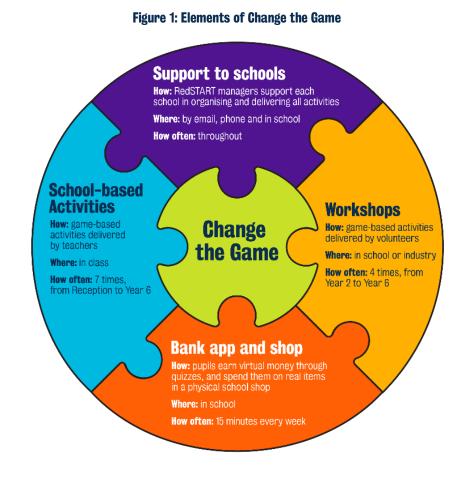
- **Chapter 1** details the different elements of the programme. The Theory of Change is also included in this chapter.
- **Chapter 2** details the evaluation design, the collection of pupil outcomes, and presents the impact evaluation findings.
- **Chapter 3** outlines the approach to the qualitative and survey research with teachers, volunteers, and delivery staff, and presents the findings.
- **Chapter 4** combines the information from Chapters 2 and 3, to provide insights into how the intervention has created change, and to outline key takeaways generated by the first year of the evaluation.
- **Chapter 5** explains the next steps in the evaluation process. Going forward, the evaluation will be expanded to include a new cohort of Reception students who we aim to track through all seven years of primary school.



3 Change the Game

3.1 Description of the intervention

Change the Game is a financial education programme, delivered by the financial education charity RedSTART Educate. In its first year (the academic year 2022/23), which is the focus of this report, the programme was delivered to primary school children in over 50 primary schools across the UK. The schools are located across regional hubs in England (North London, South London, Lowestoft, Bristol, North-East England), and Scotland (Edinburgh and the Scottish Borders). The programme (which is summarised in Figure 1) consists of workshops, school-based activities, and a bank app and shop. The activities are organised and facilitated by RedSTART regional managers who work with the schools within each regional hub.





3.1.1 Workshops

The workshops are delivered by volunteers, supported by RedSTART staff. Throughout primary school, pupils will attend four workshops: in Year 2, Year 3 and Year 5 in their school, and in Year 6 at an external location such as a corporate partner's office.

RedSTART recruits workshop volunteers through two main routes. First, they work with financial institutions to highlight links to their Corporate Social Responsibility (CSR) programmes. Staff are typically encouraged to use their corporate volunteering days to work with RedSTART. Second, RedSTART builds relationships with colleges and universities by highlighting volunteering as a unique opportunity for sixth form and undergraduate students. The volunteers in the first year of the programme came from more than 30 different financial institutions (many of whom had also provided funding to RedSTART to deliver the programme), and 3 colleges and universities.

In total, 522 volunteers helped deliver 151 workshops across participating schools during the first year of the programme. This included 502 volunteers from financial institutions and 20 from colleges and universities. Volunteers are provided with online training about the programme and on safeguarding, lasting one to two hours, and workshop materials, to equip them to run and deliver a workshop, with support from a RedSTART staff member.

3.1.2 In-class sessions

The in-class sessions are delivered by classroom teachers in the participating schools. RedSTART provides teachers with resources to deliver the sessions, and students are given take-home materials. In the first year of the programme, 122 in-class sessions were delivered.

3.1.3 The RedSTART bank app and shop

The bank app allows students to take part in maths quizzes, practicing their basic maths skills, such as addition, subtraction, and percentages, and reinforce learning from workshops through knowledge quizzes. Students earn virtual pounds through quizzes, and can practice financial behaviours by allocating their virtual pounds to current and savings accounts on the app. The app is connected to a physical shop set up in the school where pupils can spend their virtual pounds on real items, ranging from smaller, cheap items, to larger, expensive items that require pupils to save up. The bank app and shops are currently being rolled out in participating

schools in the second year of the programme, and were therefore not part of the first year, which is the focus of this report. However, the bank app and shop will be a key component of the programme in future years, and in subsequent evaluation reports.

3.1.4 Support to schools

In addition to supporting schools in organising, delivering, and implementing the workshops, inclass sessions, and the bank app, RedSTART staff also support schools to understand the benefits of financial education, including supporting school leadership to explain the benefits of Change the Game to Ofsted inspectors.

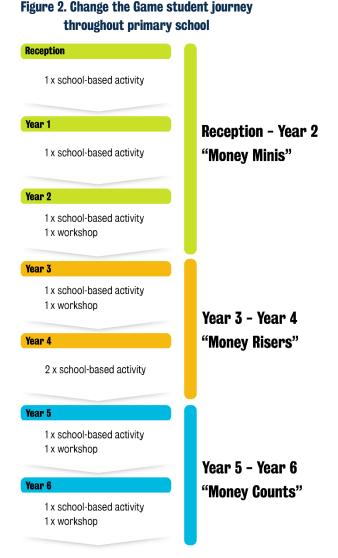
3.1.5 Student journey

One of the unique features of the RedSTART programme is its length. The programme is delivered across several school years until the end of primary school in Year 6. Figure 2 shows the journey of a student who starts Change the Game in Reception, taking part in activities until the end of primary school in Year 6.

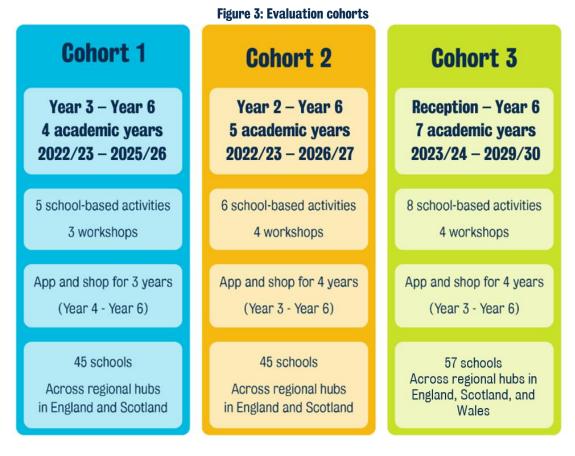
3.2 Evaluation cohorts

Because the evaluation is tracking students over a long period of time, there are three main cohorts of students included in the research. They are not all receiving the 'complete' sevenyear Change the Game journey, from Reception to Year 6. The different cohorts are partly a result of practical considerations when implementing the trial, but it may also benefit the evaluation. Ultimately, we have three different cohorts of pupils, who will take part in different amounts of activities (dosage) and across different time periods (length).

This first report is focused on Cohort 1 (who started the intervention in Year 3 in 2022/23) and Cohort 2 (who started the intervention in Year 2 in 2022/23). Cohort 3 (who started the intervention in Reception in 2023/24) is not covered in this report. Figure 3 below shows how



each of the cohort differs in terms of the number of academic years, activities they will complete, and number of participating schools. A fuller description of the activities that Cohort 1 and Cohort 2 received in 2022/23 is included in Appendix 1.



3.3 Theory of Change

We developed a Theory of Change model for the programme in partnership with RedSTART. A Theory of Change model is a comprehensive description and illustration of how and why a desired change is expected to happen (Figure 4).



Figure 4: Theory of Change

Income inequality is rising in the UK, while financial literacy is falling. The COVID-19 pandemic exposed the financial precarity that many families live with: 25 per cent of children as young as six said they are more anxious about money because of the pandemic (The Centre for Financial Capability, 2021). 50 per cent of adults with debts experience mental health problems (Royal College of Psychiatrists, 2017). Early intervention is crucial, as research suggests that children may start forming money habits by as young as seven (MAS, 2013). However, despite evidence also showing the increased effectiveness of early interventions, there is currently significantly more research available for interventions in secondary schools (MAS, 2018).

Aims

Situation

To provide financial education that transforms the life chances of young people across the UK.

Inputs	Activities	Outputs (Change the Game first year: 2022/23)	Outcomes	Impact
 Funding (corporate partners, fundraising) Staff time Volunteer training materials Volunteer time Volunteer time Workshop materials Materials for teachers School/teacher time Take-home resources IT support Materials for 	Process • Working with financial institutions to engage them in the delivery of financial education through highlighting clear links between financial education and CSR interests • Building and maintaining mutually beneficial relationships with universities and colleges through highlighting volunteering as a unique opportunity for sixth form and undergraduate students, and the potential for participation to encourage a more diverse range of applicants in the future • Relationship building with schools to allow multi-year delivery	 Money Minis programme delivered to Year 2 students. Year 2 students learn the key financial concepts of earning and saving. Money Risers programme delivered to Year 3 students, and Year 4 students. They experience earning, saving and budgeting money, and learn key concepts around prioritising financial needs and wants Money Counts programme delivered to Year 5 students, and Year 6 students. They learn key concepts around influences on saving and spending, the value of money, borrowing, and emotional links to money Children take home resources to share with their parents/guardians Teachers deliver in-class sessions to young people Schools receive briefing packages on the programme for Ofsted inspections Not delivered in 2022/23, but will be delivered in 	Impact Outcomes for children: Ability Improved maths attainment at primary school Improved understanding of the role of money in society Improved understanding of money management Mindset Improved general aspirations Improved general aspirations Improved money efficacy Improved attitudes to money management Connection Increased access to financial education resources Behaviour	 Impacts for children and young people: Children and young people have the knowledge and skills required to understand risk and make sound financial decisions Children and young people have raised aspirations which facilitate social mobility later in life Impacts for the education sector: The primary school workforce has increased skills and confidence in delivering financial education, and believe in the benefits it can bring for children
programme workshops • Development and maintenance of RedSTART Bank app	Schools engage with Change the Game through regional hubs across the UK <u>Not delivered in 2022/23, but will be delivered in future years</u> RedSTART Shop set up in each primary school	future years • Children engage with the RedSTART Bank app • Children practice basic maths skills such as addition, subtraction and percentages through maths quizzes on the Bank app • Children reinforce knowledge learnt in workshops through knowledge quizzes on the Bank app • Children practice spending and saving behaviours through earning, allocating and spending money on the Bank app ection will improve young people's long-term financial security	 Improved skills to manage money well day- to-day Outcomes for adults: Primary school teachers and volunteers are more confident in delivering financial education Volunteers and teachers learn and adopt more beneficial financial behaviours 	 bing for charlent Policy impacts: There is a clear blueprint for the delivery of effective, evidence-led financial education in primary schools All children in primary schools in the UK receive high quality, age-appropriate financial education

Assumptions

· Delivering the programme to children with the highest needs (in schools of deprivation level 5 or below) will create the greatest impact

• The lack of financial education in the English national primary school curriculum creates a need for external programme delivery

4 Impact evaluation

4.1 Introduction

To evaluate the impact of Change the Game, the King's College London research team is running a two-armed RCT, with randomisation occurring at the school level. This approach was selected as, when they are conducted to a high standard, RCTs are an extremely robust method for estimating the impact of an intervention. This is because when certain conditions are satisfied – such as the trial having a sufficient sample size and balance checks being completed – we can be confident that any differences that are observed post-intervention between the treatment group and the control group are a result of the intervention as, on average, the two groups are otherwise very similar.⁷

Initially 49 schools were randomised, of which 45 schools ultimately participated in the first year of the evaluation. All schools had a pre-existing relationship with RedSTART and are based in areas with high scores on the index of multiple deprivation. Of these, 22 are in the control group and 23 form the treatment group. Pupils in Year 2 and 3 are in scope for the trial. In the first year of the trial, the treatment condition for a school was the delivery of Change the Game activities to all students from Years 2 to 6 and the control condition was Change the Game activities for Year 6 students only.

The primary outcomes of interest are general financial knowledge and behaviours and maths attainment. The former was captured via surveys (see Appendix 2) designed specifically to measure students' understanding across a range of domains related to financial literacy, whilst the latter is collected via the NPD or directly from schools. Survey data collection took place before and after the intervention was delivered in the 2022/23 school year.

In most schools, staff chose to use an opt out consent process. That meant students were excluded from the trial if their parents opted them out of the study after receiving information about the processes involved. In a sub-set of schools, staff chose to use an opt in consent

⁷ Roberts, C., & Torgerson, D. (1998), Randomisation methods in controlled trials. *BMJ (Clinical research ed.)*, *317* (7168)



process, where students were included only if their parents actively consented to their participation. The vast majority of in-scope students were included in the study.

We then analysed the data collected at baseline and endline, comparing the changes in scores in the treatment and control group, to estimate the causal effect of the programme on the primary outcomes.

This chapter outlines the design of the impact evaluation and then explores the findings.

4.2 Methodology

This section outlines the research questions, the research design, provides information on sampling, explains our data collection approach, and provides an overview of the analytical strategy that has been used to address the research questions.

4.2.1 Research Questions

The impact evaluation of Change the Game aims to answer two primary research questions that are linked to financial literacy. These questions were devised in collaboration with the RedSTART team following a review of their Theory of Change.

- What impact does participating in Change the Game have on pupils' general financial knowledge and behaviours?
- What impact does participating in Change the Game have on pupils' maths attainment in primary school?

In our analysis, we also explore the impact that participating on Change the Game has on pupils' financial ability, financial mindset, financial behaviours, and financial connection.

4.2.2 Design

The central problem in estimating the impact of an intervention is that once an intervention has been delivered, we can no longer know what would have happened to the treated individuals if they had not participated. Simply measuring their outcomes or abilities before and after an intervention is insufficient because there could be multiple confounding factors that impact on the outcomes of interest aside from the intervention itself. For example, in the RedSTART context, ageing by one year and completing an additional year of maths education will probably affect students' understanding of financial concepts and their numeracy skills. Therefore, to accurately estimate the impact of an intervention it is necessary to create a counterfactual, that is, a measure of what would have happened to the treated group had they not been treated.

One way of creating a counterfactual is to measure the outcomes of a group before the intervention has taken place, then randomly allocate the treatment to half of the group, and then compare the changes that have occurred in both groups. If there is a sufficient sample size, the randomness of the allocation should ensure that the only meaningful difference between the treatment and control group is the intervention itself, meaning that any differences in the changes that each group experiences can be attributed to the intervention. This approach is well-known and has a long history in medical sciences and is increasingly common in social sciences.

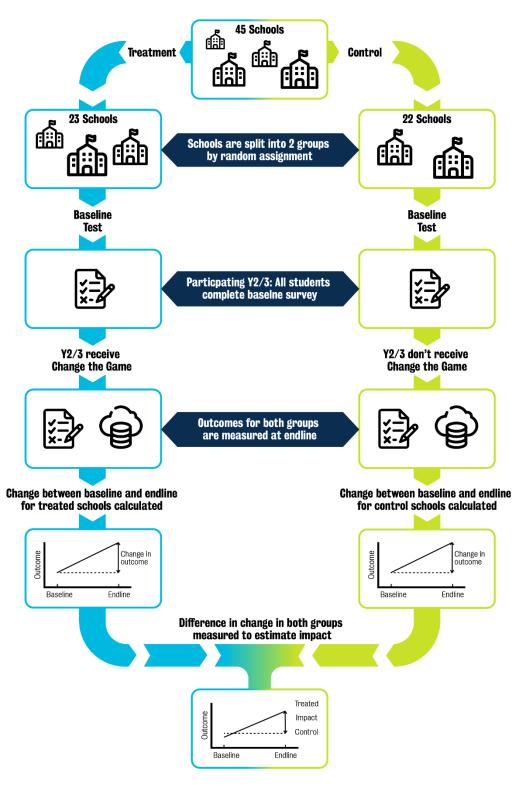
Change the Game was a good candidate for an RCT as it fulfils several crucial criteria: RedSTART is delivering in enough schools to create a sufficient sample size, it is possible to collect reliable outcomes data, and (crucially) there is buy-in from key stakeholders.

The study received approval from the King's College London College Research Ethics Committee Social Sciences, Humanities and Law Research Ethics Subcommittee. Appendix 4 contains a discussion of the key ethical issues considered for the study.

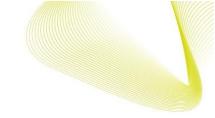
An outline of the RCT process is visualised in Figure 5, overleaf.



Figure 5: The RCT Process



Change the Game Evaluation: Year 1 Report



5 The study sample

The participating primary schools are all in areas with high levels of deprivation. There are some key differences between schools involved in Change the Game and the broader population of schools in England (see Table 2).

Variable	Estimate	P Value	Confidence Interval	Significance
Average number of pupils: all English Schools	283.83	0.00	281.18 - 286.48	
Average number of pupils: difference for CTG schools	66.62	0.01	13.99 - 119.25	*
Percentage of pupils eligible for Free School Meals: all English schools	22.55	0.00	22.34 - 22.75	
Percentage of pupils eligible for Free School Meals: difference for CtG schools	21.69	0.00	17.54 - 25.84	***

Table 2: Differences between schools included in Change the Game to all English schools

Change the Game schools include Scottish schools. Source: DfE Schools Census, Scotland Schools Census.

Schools involved in Change the Game are, overall, slightly larger than the average primary school in England. The average English primary has 284 pupils, while Change the Game schools (including Scottish schools) have, on average, 67 more pupils, resulting in an average size of 351. Likewise, Change the Game schools have a higher proportion of pupils eligible for Free School Meals; the average across English primary schools is 22.5 per cent, while Change the Game schools have closer to 44.2 per cent. Figure 6 illustrates this difference. This is by design as Change the Game focuses on supporting schools in disadvantaged areas.



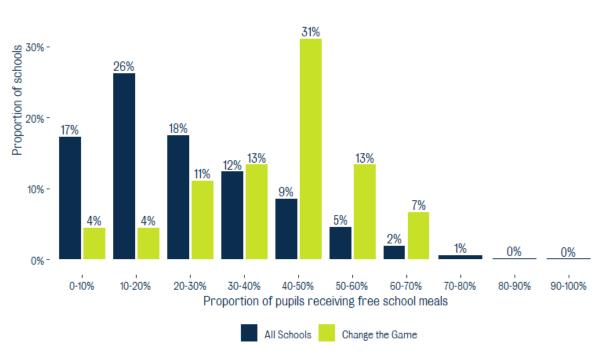


Figure 6: Distribution of pupils receiving free school meals for Change the Game vs. other schools

40% -

Note: excludes Scottish schools.

In this first year of the evaluation, the study sample was drawn from Year 2 and Year 3 in these participating schools. This cohort was chosen for several reasons. Firstly, we and RedSTART want to conduct a longitudinal study that tracks pupils' progress throughout primary school, making it logical to include the youngest pupils that were receiving Change the Game at the time in the research. Secondly, by only including the youngest pupils, Change the Game activities could be offered to the oldest students in the control schools without significantly increasing the risk of spillover effects affecting the research. This was seen as beneficial as it would secure the ongoing buy-in from the control schools, which is crucial for the study. Lastly, we decided to include two year groups to ensure a robust sample size was achieved.

School leaders were given the option to select an opt in or opt out guardian consent process. In schools that have selected opt out, pupils whose parents chose to opt them out were excluded. On the other hand, in schools that selected opt in, pupils whose parents did not provide explicit consent were excluded. There are no other exclusion criteria.

For this cohort, we estimated the available sample across 49 schools to be approximately 2,400 pupils in total. However, this has proven to be an underestimate; over 3,000 students participated in the first year of the evaluation, even though only 45 schools ultimately

participated in data collection. This larger sample size means we are powered to capture a small-sized effect. For a detailed discussion of the sample size and power calculations, please refer to the trial protocol.⁸

Focusing on the demographic characteristics of the sample, overall, 48 per cent of the sample are female and 51 per cent are male. The treatment group skews slightly more male than the control (by 3 percentage points). Table 3 provides the breakdown of the sample by ethnicity.

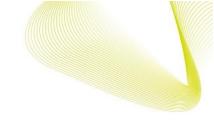
-	
Ethnicity	Percentage
White	60.0%
Asian	13.0%
Black	12.2%
Mixed/Other	12.5%
Not known	2.4%

Table 3: Percentage	e splits of	f <mark>sample b</mark> y	y ethnicity
----------------------------	-------------	---------------------------	-------------

60 per cent of the sample are eligible for Free School Meals, and 19 per cent have a recorded special educational need or disability. For detailed assessment of sample balance and breakdowns by treatment condition see Appendix 3.

⁸ Available at: <u>https://osf.io/6rpt7</u>

Change the Game Evaluation: Year 1 Report



6 Findings

In this section we provide initial analysis of the impact of the first year of Change the Game delivery on the outcomes of Year 2 and 3 pupils.

6.1 Outcomes analysed

In this analysis, we report on Change the Game's impact on the following outcomes derived from the survey:

- Financial knowledge (primary outcome): an aggregate of nine items from the survey covering financial ability, behaviours, connections and mindset.
- Ability: an aggregate of two items from the survey relating to financial understanding, both of which are also included in the primary outcome.
- Behaviours: an aggregate of two items from the survey relating to financial behaviours, both of which are also included in the primary outcome.
- Connection: a single item from the survey measuring the extent to which pupils have access to financial education and resources, which is also in the primary outcome.
- Mindset: an aggregate of seven items from the survey relating to general and financial mindsets, four of which are included in the primary outcome, while the other three relate to confidence in maths skills and general aspirations.

For more information about items included in each of these outcomes and how they are coded, refer to Appendix 2.

In addition, we report on maths attainment, using teacher assessed grades reported by the schools. As schools report in-year achievement very differently, we undertook a translation exercise to make them broadly comparable. Each school supplied an explainer of each of the assessment codes, and we used that to generate a key referring to whether a particular code indicated a pupil was meeting the expected level in maths for their year, which was coded as 1 if they were and 0 otherwise. This means that our outcome here measures the proportion of pupils in the treatment vs control group that are at or above the standard for their year.

6.2 Findings

6.2.1 Overall impact of Change the Game

Table 4 gives the estimated impact of Change the Game on the outcomes of interest. In this section we use p-values to indicate the statistical significance of an observed difference. Full regression tables are provided in Appendix 5.

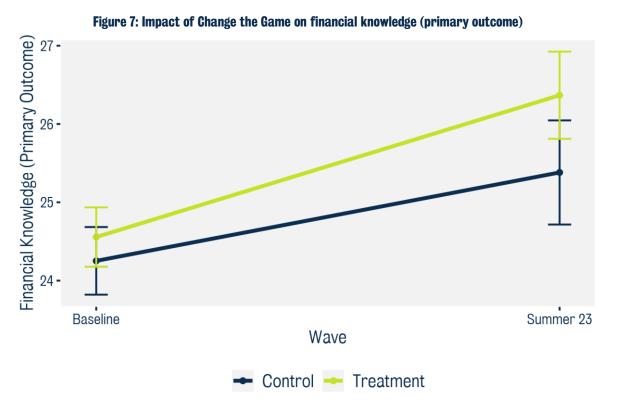
Table 4. Impact estimates						
Variable	Estimate	P Value	Confidence Interval	Significance		
Financial Knowledge (summer 2023)	0.90	<0.01	0.35 — 1.45	**		
Ability (summer 2023)	0.15	0.13	-0.05 – 0.35			
Behaviour (summer 2023)	0.10	0.44	-0.15 — 0.35			
Connection (summer 2023)	0.19	<0.01	0.07 – 0.31	**		
Mindset (summer 2023)	0.42	<0.05	0.13 – 0.71	*		
Mathematics grade	-0.04	0.42	-0.06 - 0.14			

Table 4	Impact	estimates
---------	--------	-----------

Financial knowledge, aspirations, financial attitudes and mathematics confidence collected via survey; mathematics grade provided by school. Controls for method of survey completion at baseline and summer '23, year group, ethnicity, gender and FSM eligibility. * p < 0.05; ** p < 0.01; *** p < 0.001. See Appendix 5 for full regression tables.

Figure 7 overleaf plots the effect of one year's participation in Change the Game. We find that being a Year 2 or Year 3 pupil in a school that participated in Change the Game increased pupils' financial knowledge between the beginning and end of the year. Pupils in treated schools had knowledge levels 0.9 higher at the end of the year than pupils in control schools, holding constant year group, method of survey completion and demographics. The mean score in the control group was 25.4, so this represents an increase of 3.5 per cent, equivalent to an effect size (Cohen's d) of 0.26, a small-to-medium effect. This effect size is in keeping with effect sizes of other financial education interventions, which one meta-analysis found to be on average 0.19 (Hedge's g).⁹

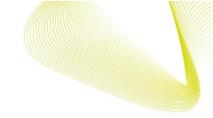
⁹ Kaiser, T., & Menkhoff, L. (202a0). Financial education in schools: A meta-analysis of experimental studies. *Economics of Education Review*, *78*, 101930.



Controls for gender, ethnicity, FSM eligibility, year group and mode of survey completion.

Pupils in treated schools had financial ability levels 0.15 higher at the end of the year than pupils in control schools (see Figure 8, overleaf). The mean score on this outcome in the control group was 6.1, so this represents an increase of 2.5 per cent, but is not statistically significant. Pupils in treated schools had financial behaviour levels 0.1 (1.8 per cent) higher at the end of the year than pupils in control schools (see Figure 9, page 27); this is also not statistically significant.

Pupils in treated schools had financial connection levels 0.2 higher at the end of the year than pupils in control schools (see Figure 10, page 27). The mean score on this outcome in the control group was 3.4, so this represents an increase of 5.5 per cent. This is equivalent to an effect size of 0.22, a small effect. Pupils in treated schools had mindset levels 0.4 higher at the end of the year than pupils in control schools (see Figure 11, page 27) The mean score on this outcome in the control group was 17.5, so this represents an increase of 2.3 per cent. This is equivalent to an effect size of 0.17, a small effect.



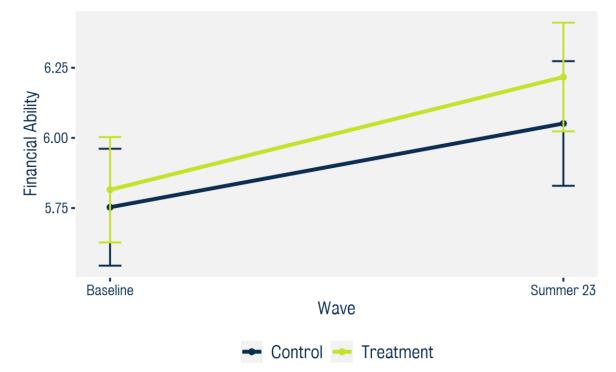
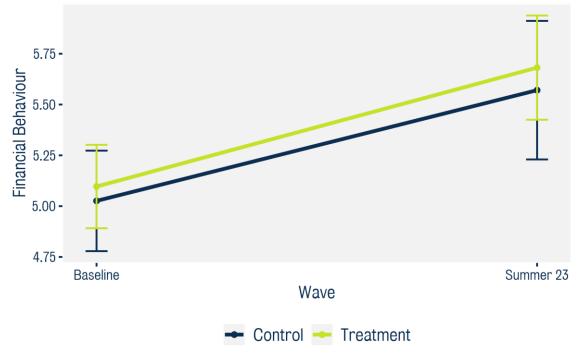


Figure 8: Impact of Change the Game on financial ability

Controls for gender, ethnicity, FSM eligibility, year group and mode of survey completion.

Figure 9: Impact of Change the Game on financial behaviours



Controls for gender, ethnicity, FSM eligibility, year group and mode of survey completion.

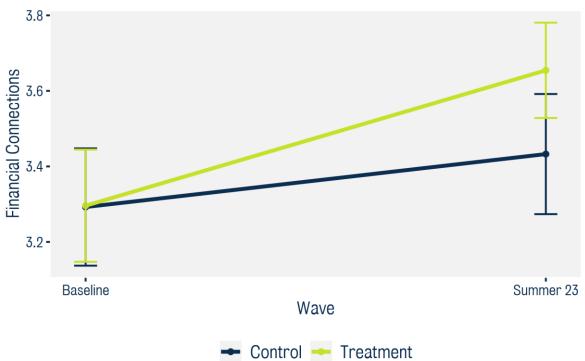
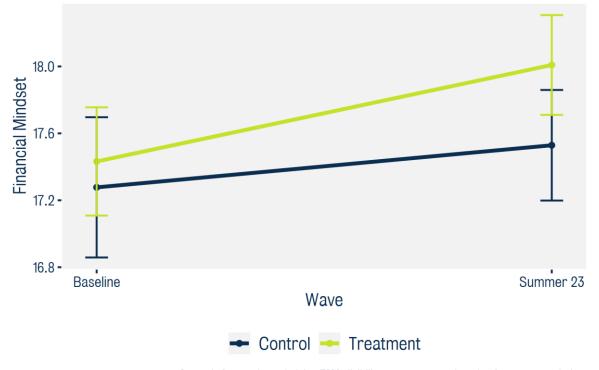


Figure 10: Impact of Change the Game on financial connections

Controls for gender, ethnicity, FSM eligibility, year group and mode of survey completion.

Figure 11: Impact of Change the Game on financial mindset



Controls for gender, ethnicity, FSM eligibility, year group and mode of survey completion.

In treated schools 67 per cent of pupils were at or above the expected standard in maths, compared to 71 per cent in control schools (see Figure 12). The impact of Change the Game on this outcome is not statistically significant.

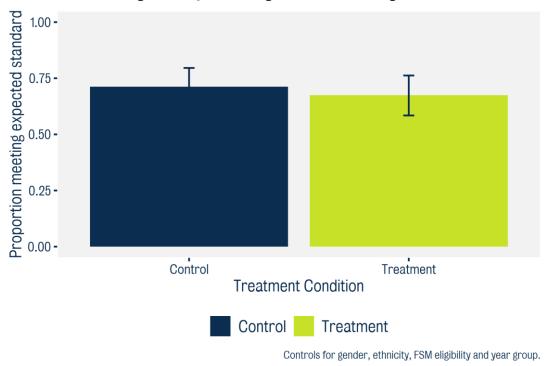


Figure 12: Impact of Change the Game on maths grade

6.2.2 Variations by demographics

We now consider the extent to which either the pre-intervention level of financial knowledge and ability or the effectiveness of Change the Game are affected by demographics. Overall, we do not see strong differences by demography in these aspects. We look at gender, ethnicity, and eligibility for free school meals; see Tables 16 - 21 in Appendix 5 for the outputs of these analyses.

On gender, we see some signs that overall male pupils have lower levels of financial knowledge and ability. Although starting points are very similar, all else equal, in Summer 2023 their scores particularly on financial behaviour are significantly lower than female pupils and in some models this is the case for financial mindset as well. There are also some signs that the treatment may have worked better for female pupils than male pupils in terms of building financial connection, as there is a negative interaction between treatment and male gender for this variable.

On ethnicity, all else equal (including treatment status and baseline score), pupils of Asian ethnicity scored significantly lower on financial ability in Summer 2023 than white pupils. There are also some signs that the treatment may have worked better for pupils whose ethnicity is not known on financial connection.

On eligibility for Free School Meals, we do not see significant differences in either outcomes or interactions with treatment. It is important to note that schools involved in Change the Game are in relatively deprived areas so it is likely that many pupils who are not eligible for free school meals are close to the threshold, so this may not represent a 'true' measure of the differential in treatment effect compared to pupils from more advantaged households.

Overall, the findings from this investigation of possible differences in the effectiveness of Change the Game for different groups of pupils suggests fairly uniform benefits across pupils from different demographic backgrounds. Although there are signs of some interactions between the treatment effect and some demographics, this is exploratory analysis, and the lack of consistency in interactions across outcome domains suggest caution is warranted in interpreting these findings.

If patterns start to emerge more clearly and consistently across multiple outcomes and waves of the study, especially as more questions are incorporated into each outcome, then it will be more possible to confidently conclude these differences are meaningful.

6.3 Limitations and future analysis

6.3.1 Participating schools

As noted, the Change the Game group of schools are on a bit larger than the average across England, and have higher levels of disadvantage, as measured by the proportion of pupils receiving Free School Meals. This should be borne in mind when thinking about which schools Change the Game is likely to be effective for.

6.3.2 Design

Whilst we believe the design of the RCT itself is robust, there are several limitations it is important to be mindful of.

Firstly, the control condition risks some spillover. To ensure buy-in from control schools, it was agreed that older pupils who were not participating in the trial would receive Change the Game activities. The Year 2 and 3 teachers who teach pupils in the tracked cohorts would not have directly delivered the activities, but it is plausible that the introduction of the programme

into the school could lead to them including aspects of financial education into their teaching that they normally would not have. Furthermore, if children in the study sample had siblings in older years, contamination could have occurred in conversations at home or outside the classroom. Given the unstructured and infrequent way in which control pupils would have interacted with the intervention, we do not consider the risk of contamination to be significant. If spillovers have occurred, they would reduce the measured impact of the programme by improving outcomes in the control group, so if anything, it would mean that we underestimate the causal effect of the programme.

Secondly, there has been attrition, with four schools initially randomised not ultimately taking part in the evaluation. These schools were split evenly across treatment and control so the consequences for the causal estimate are limited. We hope that several of these schools will rejoin the evaluation in subsequent years; however it will be important to continue monitoring attrition of schools over the course of the programme, and to understand whether particular types of school (e.g. size, geography) are more likely to withdraw, as this impacts the extent to which the findings from Change the Game can be generalised to other schools. In addition, although withdrawal in this first year of the evaluation was not correlated with treatment condition, we will need to monitor to ensure that over time attrition isn't correlated with treatment assignment.

Lastly, current analysis suggests that a slightly lower proportion of pupils from treatment schools completed the survey. This is particularly the case looking at the sample of summer 2023 surveys matched to school data, which will be our sample for the subsequent analysis conducted using the NPD. Although this attrition is not significant at conventional levels, we will continue working with schools to try and identify whether any of the remaining unmatched summer surveys can be matched to school data, and where there are schools with particularly low response rates, we will work closely with RedSTART and the schools to maximise retention in subsequent waves of data collection.

Appendix 3 provides more detail on sample composition and attrition.

6.3.3 Quantitative data collection

There are difficulties inherent to collecting data from a cohort of young children and there were also points where it was necessary to be pragmatic about data collection to adapt to the requirements and pressures on schools.

The survey scale was developed for the purpose of this research and this was its first use at scale. Whilst the scale is derived from existing validated scales, the alterations we made to make it age appropriate could plausibly result in less reliable or valid measures of the concepts

we aimed to capture. Analysis of the survey results showed they were balanced across the treatment and control groups and responses generally showed a sensible distribution (see Appendix 3), but we will explore this further over time, particularly as we get access to pupil demographics via the NPD. Because we are interested in the difference between treatment and control groups, unless any issues with reliability or validity were correlated with treatment assignment, we could still be confident in the treatment effect. It does, however, mean that it is necessary to be more cautious about interpreting the absolute levels of responses on the outcomes, and particularly on the single items underlying the outcomes, as the reliability and validity of each single item has not been extensively tested.

As survey measures were collected in classrooms by teachers, it is highly likely that they were not delivered consistently across schools. Teachers were given guidance by the research team, and most children completed the surveys without additional support, but we were not able to control delivery entirely. Children with weaker English language skills or additional learning needs will have received support which may have influenced their answers and teachers may have also guided whole classes through the survey contrary to the guidance they received. Although this may affect the validity of some pupils' individual responses, it should not affect the treatment estimate, as schools and pupils whose response are affected should be distributed across the treatment and control conditions. We have no reason to believe that control schools differed systematically from treatment schools in either the number of pupils who may have needed additional support or the likelihood of teachers leading the class through the survey.

Schools also had the option to complete the survey online or on paper. There is some evidence that this choice may have altered how children responded to the questions: choice of survey medium is correlated with some of the outcomes (behaviours specifically; see Appendix 4), and there was some imbalance in which survey medium treatment vs control schools chose. We have managed this by controlling for survey medium in the main analysis. It is not practical to require schools to use either paper or Qualtrics surveys exclusively, so we will monitor the extent to which survey medium affects responses and manage this analytically going forward.

The process of matching the surveys to the administrative data provided by schools was also complex, as pupils sometimes used different names to those they were recorded as in the school data or wrote incomplete or different dates of birth to the school data. Through a combination of an iterative matching process using R software and manual matching (where researchers worked through un-matched pupils and identified matches, see Appendix 3) we were able to successfully match over 97 per cent of summer 2023 surveys to a student in the administrative data. Our lowest match rate was 80 per cent and for three quarters of schools we matched over 99 per cent of summer surveys to school data. This is a very high rate of

successful matches for a study of this type, and we inspected the data at every stage for false matches or match failures. However, there remain some unmatched surveys, and it is impossible to completely eliminate the risk of false matches without reviewing every line of data. As above, it is unlikely that false matches, if they exist, would be correlated with treatment assignment, so we do not believe that this would impact the treatment estimates presented in this report. However, we will continue to work with schools to maximise the rate of successful matches.

As discussed, we transformed teacher assessed grades in maths to create a binary score – working below expectations or at and above expectations – that would mean grades across schools were comparable. This involved interpreting a range of diverse, and at times idiosyncratic, grading systems. We liaised with teachers to assist the judgements involved. We are confident that the resulting scores are representative of actual maths attainment but, as a degree of subjective interpretation was involved in the creation of these scores, we cannot be certain that this outcome measure is entirely reliable. As with the above considerations, this means that the difference between treatment and control schools is more relevant than the absolute levels in either group.

6.3.4 Future analysis

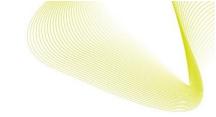
This report provides the findings of the impact of a single year of financial education provision for pupils in Year 2 and 3. We have used complete cases only (i.e. where a summer 2023 survey, a baseline survey, and demographic data are all available).

In future years we will analyse the cumulative effect of the programme alongside within-year effects. For the final analysis we will also conduct imputation to preserve as many pupils as possible where that have a small amount of missing information.

For details of these analyses, refer to the pre-registration.¹⁰

¹⁰ Available at: <u>https://osf.io/6rpt7</u>

Change the Game Evaluation: Year 1 Report



7 Implementation and process evaluation

7.1 Introduction

Alongside the impact evaluation, a light-touch implementation and process evaluation (IPE) has been completed. We conducted interviews with teachers, volunteers and delivery staff, and a survey with school staff to understand programme delivery and experiences. This data provides important context to better understand how and why the programme creates impact, or not.

This chapter explores the IPE design and its findings.

7.1.1 Aims

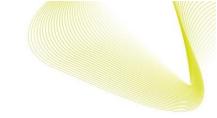
The IPE has the following core aims:

- To identify factors that facilitate or hinder the successful implementation of Change the Game, and to inform future delivery of the programme.
- To understand how school staff experience the programme and which elements they believe are particularly important or significant to the intervention and its outcomes.
- To explore levels of engagement and perceived impacts, including how this may vary between different schools across varied contexts.

7.1.2 Research Questions

The research questions for the IPE are:

- 1. To what extent is Change the Game delivered as intended?
- 2. To what extent is Change the Game different from business as usual?
- 3. What are the experiences of teachers and volunteers?
- 4. How do pupils engage with the workshops and school-based activities?
- 5. Do teachers perceive any impact on their pupils' financial knowledge, attitudes and behaviours, and maths skills?
- 6. Do teachers and volunteers perceive any impact on their own behaviours and skills, including on teachers' confidence in and knowledge of delivering financial education?
- 7. What are the key facilitators and barriers to successful implementation of Change the Game, and how can the programme be run more efficiently and effectively?



7.2 Methodology

7.2.1 Data collection

We conducted online interviews and surveys with programme staff, volunteers, and school staff, and collected administrative data from RedSTART. Table 9Table 5 provides an overview of the data collected for the first year of the project as part of the IPE.

Sample	Method	Delivery	Time			
Programme staff (n=3)	Interviews	Video call	January 2024			
Volunteers (n=8)	Interviews	Video call	January - February 2024			
School staff (n=10)	Interviews	Video call	January - February 2024			
School staff (n=188)	Survey	Online	June – July 2023			
N/A	Administrative data	RedSTART	February 2024			

Table	5:	IPE	data	collection	timeline
-------	----	-----	------	------------	----------

7.2.1.1Interview research

We conducted a total of 21 semi-structured interviews with school staff (10 interviews), volunteers (eight interviews) and programme staff (three interviews). All topic guides can be found in Appendix 6.

7.2.1.1.1 Semi-structured interviews with school staff

We interviewed school staff who had participated in some capacity in the delivery of the programme. This included classroom teachers, but also leadership staff who coordinated the programme. Across the interviews we discussed:

- Barriers and facilitators to implementing the programme.
- How pupils engaged with the programme.
- Perceived impacts of the programme on pupils and staff.
- The time and resources required to implement the programme and how activities interacted with the existing curriculum.

Interviews lasted approximately 30 minutes. School staff were sampled from all regions involved in the research.



7.2.1.1.2 Semi-structured interviews with volunteers

Similar interviews were held with volunteers who supported delivery of workshops. These interviews covered:

- How RedSTART supported volunteers to engage with Change the Game.
- Experiences of delivering workshops with pupils, including any barriers and facilitators experienced.
- Perceived impacts of the programme on pupils and volunteers themselves.
- The time and resources required to engage with the programme.

Interviews lasted approximately 20-30 minutes. Volunteers were sampled from all regions involved in the research.

7.2.1.1.3 Semi-structured interviews with programme staff

We also interviewed RedSTART's regional managers after the first year of programme delivery. Across the interviews we explored:

- The barriers and facilitators to implementing the programme.
- Experiences of delivering the programme, including reflections on successes and challenges of the intervention.
- Perceived impacts of the programme on pupils and schools.
- The time and resources required to implement the programme.
- The sustainability of the intervention in schools and more broadly.

Interviews lasted approximately 45 minutes and were conducted by research staff who had not previously worked with the RedSTART staff to ensure existing relationships did not impact the data collection.

7.2.1.2 Survey research

7.2.1.2.1 Survey with teachers

Staff at both treatment and control schools were invited to participate in an online survey at the end of the first year, lasting around 10 minutes. The survey collected data on:

• Skills and confidence in delivering financial education

- Experiences of delivering the programme, including levels of satisfaction and pupil engagement
- Perceived impacts on pupils' financial knowledge, attitudes, behaviours and maths skills.

In total, the survey was completed by 188 respondents, including 110 (59 per cent) from treatment schools and 78 (41 per cent) from control schools. The respondents included 122 classroom teachers, 40 leadership staff, 15 teaching assistants (TA), seven special education needs (SEN) support staff, and four staff in other roles. Some questions were skipped or were not applicable to all staff members meaning the number of respondents varies by question – the number of respondents is indicated where necessary in the following section.

The online survey was designed in Qualtrics. The full survey questionnaire is included in Appendix 7.

7.2.1.2.2 Administrative data

The following administrative data was collected from RedSTART to understand alignment of programme implementation with the Theory of Change.

- Number of school-based activities and workshops delivered.
- Number of attendees at training sessions and type of attendee (e.g. teacher, financial institution volunteer, undergraduate volunteer, sixth form volunteer).
- Number and timing of sessions delivered.

7.2.2 Analysis

7.2.2.1 Interviews

Interviews were recorded and transcribed in full by a professional transcription service. Transcripts were then entered in NVivo 14 for content analysis. Interview transcripts were analysed using a case-and-theme based framework approach. This approach has allowed us to identify commonalities and differences in the diverse qualitative data we collect and create descriptive categories and explanatory concepts.¹¹

¹¹ Gale, N., Heath, G., Cameron, E., Rashid, S. & Redwood, S. (2013) *Using the framework method for the analysis of qualitative data in multi-disciplinary health research*. BMG Medical Research Methodology. 13.



7.2.2.2 Surveys with teachers

Responses to closed questions have been analysed descriptively in R to summarise teachers' views. Where appropriate, findings have been visualised for easy interpretation. Responses to open questions in the surveys were imported into NVivo for analysis. These responses were then analysed using a case-and-theme based framework approach to identify any trends and build insights of teachers' experiences of the programme.

7.2.2.3 Administrative data

RedSTART administrative data has been analysed descriptively to capture the volume and nature of activities undertaken as part of the programme.

7.2.3 Limitations

7.2.3.1 Interviews

While steps were taken to ensure that participants included a variety of delivery contexts, such as by region, the sample is still a small proportion of all participants, and may be biased towards staff who were motivated to provide feedback, such as those with positive experiences of the programme. The findings therefore may not necessarily reflect the views of the wider population. The strength of the qualitative data is that it provides insights into a range and diversity of views and experience of participants. The interview findings should be considered with these strengths and limitations in mind.

7.2.3.2 Survey

The survey was distributed to all participating schools but was not compulsory. Responses to the survey are therefore likely biased towards staff who were motivated to provide feedback; those respondents may have had more positive experiences of the programme than average. As such, the results cannot be generalised to the whole population of teachers in control and treatment schools.

It's also important to note that respondents in control schools may have been involved in delivering the programme to Year 6 students. Therefore, any comparison between control and treatment schools may not be a meaningful comparison between participants and non-participants. Generally, comparisons between treatment and control schools are only provided for illustrative purposes, and cannot provide evidence of causality. Since we cannot compare changes between control and treatment participants with baseline scores, we cannot conclude

with confidence that Change the Game has had an effect as any differences could have also existed before RedSTART started working with these schools.

Nevertheless, the survey provides detailed insights from staff in treatment schools about their experiences of taking part in the programme, and their perceptions of impacts so far, which we will seek to track over the coming years.

7.3 Findings

7.3.1 To what extent is Change the Game delivered as intended?

Change the Game has been delivered as intended in the first year of the programme. RedSTART staff supported teachers and volunteers to deliver the intended number of workshops and school-based activities across all treatment schools, as outlined in the Theory of Change. As planned, the final element of the programme – the bank app and shop – will be rolled out in subsequent years. Importantly, we have not observed any delivery in control schools in the year groups tracked as part of the evaluation.

7.3.1.1 Delivery from the perspective of teachers and schools

Across the interviews, it was clear that teaching staff in primary schools generally face pressures to deliver the requirements of the existing curriculum, as well as additional activities that they and the school want to provide for their students. This represents a potential challenge for an intervention like Change the Game. However, teachers indicated that the delivery model is efficient and relatively easy to fold into business-as-usual activities in the school. In the survey, 91 per cent of teachers involved in the programme said it had been straightforward to run the programme. School staff were happy to find the time to deliver Change the Game, as many felt it was important to deliver financial education in primary schools, especially in the context of the cost-of-living crisis and high levels of deprivation among pupils.

'[A lot of our families] are on the breadline. Families are using our foodbank regularly. So, we felt that as a school it was important to prioritise this financial education for our pupils.'

In the survey, almost all staff across treatment and control schools (98 per cent) agreed that it is important to deliver financial education in primary schools, and that children need to develop positive money habits from a primary school age.



The strong buy-in amongst school staff was critical to the smooth delivery of the programme, as it meant sufficient space was created for delivery. One interview respondent highlighted how the busy, yet flexible nature of primary school life meant the programme was easy to fit in but only because there was buy-in across all levels of staff – space could be made because they wanted to make it.

'To be fair, it was really easy just to sit back and say, right okay, this is all done for us, it's planned, it's resourced, we just have to make sure we deliver it in the right way and the children then know a bit as well.'

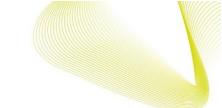
Moreover, several respondents argued that Change the Game actively complemented their curriculum and enhanced other learning that was going on in maths, PSHE (Personal, Social, Health and Economic education) and geography lessons; this made the decision to give up timetable space to RedSTART activities easier.

'So when we're talking about our geography, or any history topic links [...] the concept of money does come up. So, you know, you're making those links with the wider curriculum.'

Whilst there was some apprehension prior to the programme about the potential workload facilitating Change the Game might create, teaching staff reported that there was no significant additional work created by engaging with the programme. Training was quick, only taking staff approximately 30 minutes, and the resources and lesson plans were organised by the RedSTART team so that they could be picked up and used by teachers with relative ease.

'It's straightforward, and that's what teachers like. You know, it is an additional workload [...] it's something else to add to our role. But...it's manageable, and it was fine.'

Physical resources were delivered ahead of the sessions. Many teachers emphasised that small things, such as the resources arriving in one single bag but grouped by activity, made their job easier and increased their enthusiasm for the programme. That said, implementation did put some pressure on leadership staff who led the delivery of Change the Game in their schools, but even this additional burden was not seen as problematic. Nonetheless, teachers did emphasise how highly valued and guarded their time is, so implementation going forward should be wary of creating additional burden.



Generally, there appears to be a consistent effort made by RedSTART to make school staff's engagement as straightforward as possible. Respondents frequently commented that the overall organisation of the programme was exceptional. They found RedSTART staff easy to communicate with and volunteers (who are organised and trained by RedSTART) arrived in schools ready to contribute successfully.

'Having [the RedSTART staff] to touch base with has been fantastic. And with us, it meant that we had an additional pair of hands, an expert who we could ask certain questions to, and we found that worked really well.'

7.3.1.2 Delivery from the perspective of volunteers

RedSTART recruited enough volunteers to deliver workshops during the first year of the programme. In total, 522 volunteers helped deliver 151 workshops.

For corporate volunteers, who comprised most of our interview sample, the programme was feasible to deliver, and the training and support enabled them to deliver the workshops effectively.

Most volunteers that we interviewed described a similar process of getting recruited into the programme and had similar experiences of the onboarding and training process. Usually, their employer had circulated the opportunity through an all-staff email. Volunteers then attended an introductory talk lasting around one hour, where RedSTART provided information about the programme and what to expect as a volunteer. The subsequent sign-up process was described as simple. It involved spending less than an hour on an online self-learning portal, including completing safeguarding training and reviewing the programme materials. The training was described as easily accessible, as it was a standard format for online training.

Furthermore, on the day, prior to the children arriving, a RedSTART staff member would run through all activities and explain what they were trying to teach children. This would be repeated another time when the RedSTART staff member introduced children themselves to the activities at the beginning of the session.

All the volunteers we spoke to said it was "easy to pick up" and they felt "well-prepared" and "well-equipped" to deliver the session. Some admitted they had been nervous before the first session, and that they had not necessarily known what to expect after the online training, but the instructions on the day had resolved any questions, and the RedSTART staff member was supportive and available to answer questions. Often, people highlighted that it was easier to learn by doing, and those who had done several sessions said it was much easier to pick up the second time:

'I learn better when I get there in terms of seeing it in action. It's just how my brain works. So, as much as I did the training, I felt like I learned more in the 15 minutes before the session, I'd say, than actually doing the [online] training.'

Another potential barrier for volunteers is the time commitment required to attend workshops themselves, including the ability to use working hours for RedSTART activities. The volunteers that we spoke to did not encounter meaningful barriers to committing the time. Some had used their volunteering days, formally or informally, while others had simply blocked the time in their diary. They explained that they had very flexible working arrangements, and their employers supported the project. Scheduling had proven tricky for some respondents, who had avoided workshops that clashed with important meetings. Many noted, however, that they knew the dates further in advance during the second year of the programme, which had made scheduling easier. Finally, some said that travelling could be time consuming when delivery occurred in schools, especially when going by public transport.

It should be noted that these observations are based on the experiences of a small subset of volunteers who were partly chosen because they had attended workshops, and in some cases more than one. It is likely that further barriers exist. In future research with volunteers, we aim to explore these and any potential learnings to reduce barriers and increase up-take among potential volunteers.

7.3.2 To what extent is Change the Game different from business as usual?

Overall, it is clear from our survey and interview research that Change the Game is very different from the financial education that is usually delivered in primary schools. Two openended questions in our online survey gave a snapshot of the patchwork of financial education that currently exists in primary schools across the UK. In contrast to Change the Game, which is a structured programme of activities across many academic years and organised by an external organisation, a lot of activities described by teachers were ad hoc. Parents or local banks might come in to give talks, or teachers use their initiative to fold financial education into other aspects of the curriculum, such as teaching about using cash in maths lessons.

Financial education was also more formally included in the PSHE programmes offered at some schools. There was also one example of a teacher putting in additional time to create an elaborate role-playing game in which their students participated in a classroom economy, and gained money through tasks which could be spent on physical goods and "renting" their chair. What was clear from responses is that there is no standard offer – pupils from different primary

schools in different areas are getting vastly different financial education experiences, ranging from in-depth role-playing games to nothing at all.

The open-ended questions also explored what school staff thought was needed to make financial education in schools a success. Most responses focused on resources: staff time, access to digital and physical resources, and financial resources to continue delivering financial education. Time seemed to be the most crucial of these resource constraints, as several teachers highlighted how it would be difficult to fit in financial education into "bloated" curriculums. However, as we have already seen, Change the Game has managed to secure buy-in from teachers and schools.

Overall, there was a clear appetite for external support and input to facilitate delivery of financial education - staff seemed to believe that this sort of support could help them overcome the resource difficulties they would otherwise have.

7.3.3 What are the experiences of teachers and volunteers?

Teachers and volunteers are very positive about their experiences of taking part in and delivering Change the Game.

7.3.3.1.1 Experiences of teachers

Overall, 98 per cent of school staff surveyed said they would recommend other schools to sign up for the programme. A very high proportion of school staff enjoyed running the activities (90 per cent) and felt supported to fit the programme into the curriculum (84 per cent). They rated the different elements of the programme highly, as shown in Figure 13.

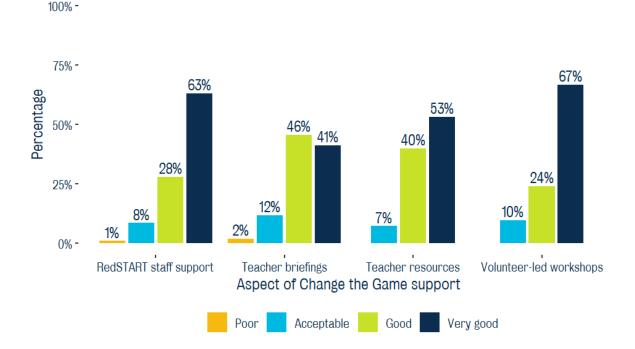


Figure 13: Teachers' views of aspects of RedSTART's support for Change the Game

7.3.3.1.2 Experiences of volunteers

Similarly, the volunteers we spoke to had enjoyed taking part, and were all planning to take part in further workshops in the future. They said it felt "worthwhile", "fulfilling", "exciting" and "enjoyable", and felt it was a nice change of pace to their usual working activities.

'I just love it. I've loved every minute of it. I love watching the children learn in a different way.'

7.3.4 How do pupils engage with the workshops and school-based activities?

7.3.4.1 Pupil engagement in workshops and school-based activities

In the survey, most staff reported high levels of student engagement in Change the Game activities. Almost all respondents reported that their students had "very high" or "high" engagement in both teacher-led (95 per cent) and volunteer-led activities (97 per cent). Engagement with take home materials was lower, but a majority of teachers still reported engagement was high. This is shown in Figure 14.

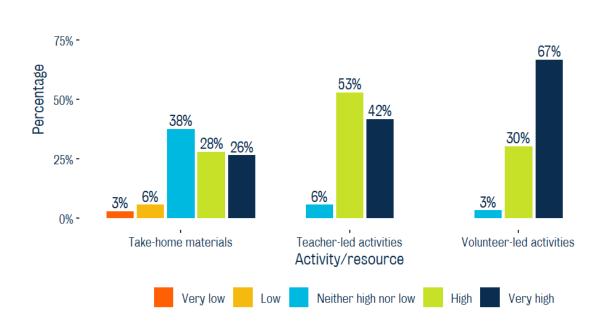


Figure 14: Teacher-reported levels of pupil engagement with Change the Game activities/resources

100% -

In interviews, school staff and volunteers reported that engagement was consistently strong. They said that pupils "loved it" and highlighted that the game-based activities ensured that the children were engaged and having fun first, and the learning outcomes came naturally as a result. Staff reported that the resources were reasonably well differentiated, and the quality of delivery was high, precipitating high engagement even among children with lower abilities.

'I've got a very low class ability wise this year and a lot of EAL children but they really, really loved it.'

More survey respondents (67 per cent) reported students having "very high" engagement in volunteer-led activities than teacher-led activities (42 per cent). In interviews with teachers, the volunteer led model was also sighted as a particular benefit of the project. Teachers explained that pupils valued the different insights and life experiences that volunteers gave to pupils.

Teachers and volunteers were also complimentary of the expertise and competency displayed by RedSTART staff in facilitating the workshops, and they valued their hands-on approach and their proactivity during delivery. This, the teachers argued, was reflected in student engagement.

'They really looked forward to it, and really engaged with it well, and they had a great relationship with [the staff and volunteers], as well, which they really enjoyed.'

7.3.4.2 Variation in pupil engagement

Most teachers agreed that the resources were appropriate and inclusive, and often helped lower-ability students engage as the activities were interactive and "concrete" which enabled them to grasp different concepts. Teachers also reported that ad hoc differentiation and additional scaffolding where possible allowed them to extend Change the Game learning to all pupils.

However, some teachers also noted that engagement with the activities was not uniform across all pupils. For students with English as an additional language, or special educational needs, some teachers reported that some resources were difficult to engage with.

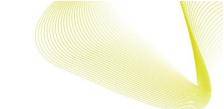
'The area we work in as well we've got a lot of like EAL children [...] I think some of them find it quite hard to access.'

This wasn't seen as problematic, per se, but teachers did note that their inclusion required increased effort from teachers and other staff. Similarly, engagement was more challenging for more reserved students who were apprehensive around new adults. Again, this didn't entirely preclude their participation, but some teachers felt that these students did benefit less from the programme activities. For some students, teachers felt that some language and concepts were difficult to engage with because of their background. However, they noted that this reinforced the purpose of the programme as it introduced new concepts to them.

'Some of them probably see their parents try to scrape together change to buy something in the shop. So yeah, I definitely think it will affect them in different ways.'

7.3.4.3 Pupil and family engagement in take-home activities

Following each school-based activity and workshop, parents are sent a 'postcard' from RedSTART with suggestions of activities to do with their children. While it is difficult for teachers to tell, their impression was that engagement with home learning was lower than in-school activities and workshops, as shown in Figure 14. In interviews and open-ended survey responses, some teachers suggested it would be useful to involve parents and home learning more in the programme going forward. In addition to the postcards, some suggested to actively



involve parents in some workshops to ensure engagement continued beyond the school gate. The RedSTART team are currently exploring ways to engage parents, and future waves of the evaluation research may involve qualitative research with parents and pupils.

7.3.5 Perceptions of Impact

7.3.5.1Teachers' perceptions of Change the Game's impact on pupils

We asked staff in the online survey if they had perceived any impact among their students due to the programme (see Figure 15). Many staff reported impacts of the intervention at this early stage. More than three quarters reported seeing improvements among pupils in financial knowledge and attitudes. Under half of respondents reported seeing improvements in numeracy skills and confidence in numeracy skills.





Figure 15: Teachers' perceptions of the impact of Change the Game on pupils

In interviews, school staff and volunteers explained they had observed students' attitudes and behaviours towards money shift during sessions, with many highlighting that a desire to save and consider spending choices was developed through the activities.

'But through the activities, you know, it made them realise that 'oh, you know, this is important, we need to save.'''

Students' command of subject-specific vocabulary and confidence in various financial concepts also grew through the sessions, according to interviewees.

'You could see the realisation on some of their faces after each session... by the end of the session you could hear them talking freely about it, so you could tell that they'd taken it on.'

Some teachers also thought the programme was having an impact on numeracy, given the adding and subtracting that is inherent to the activities, but others did not believe the relatively infrequent sessions had impacted on more general maths skills.

Whilst some effects were being felt by teachers, a common reflection amongst interviewees was that real impact would take more time. School staff believed that the RedSTART intervention was meaningful but consistency and commitment to the programme would be required for students to experience lasting benefits.

'I think it probably needs a couple more years and it needs to be built up, but I think the conversations we were having during lessons were really interesting [...] I think it will have a bigger impact, but at the moment it's just more within the lessons.'

Some interviewees suggested that the Year 1 delivery model, where students only interact with RedSTART activities once a term (at most), was too limited to create real impact, especially on maths attainment. But this was a minority view, with most staff arguing that the high levels of engagement amongst their students were contributing to positive outcomes and indicating that they expect the impact of the programme to grow over time.

7.3.5.2 Teacher's and volunteers' perception of impact on their own behaviours and skills

We also asked respondents whether the programme had impacted their own skills and confidence in relation to financial literacy and in delivering financial education.

Three quarters (76 per cent) of school staff felt Change the Game had enhanced their own knowledge about financial concepts, and 85 per cent said they felt more confident in how to deliver financial education lessons to their students.

This led to school staff in treatment schools having a high and increased level of confidence in delivering financial education, especially compared to staff in control schools. In the

treatment group, 85 per cent of respondents were "somewhat" or "very" confident in delivering financial education, compared to 64 per cent in the control group (Figure 16).

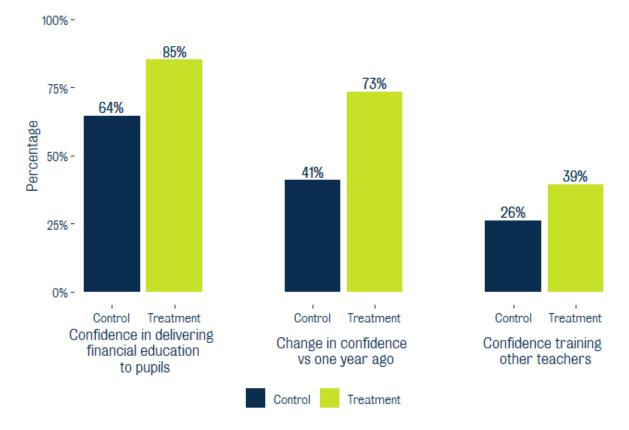


Figure 16: Confidence in delivering financial education, treated vs control teachers

In interviews, teachers gave many examples of how the programme had positively impacted their practices, from using more age-appropriate financial terminology, to adapting approaches to planning and delivering lessons after seeing the engagement and enthusiasm that RedSTART's approach achieved.

'Particularly that first session we did last year, it was really eye opening for me to think, oh okay I can change my teaching to adapt it to make it more real world for the children, to make it more understandable.'

The volunteers frequently spoke about how the workshops had brought them out of their "bubble" and made them reflect upon their own privilege. Volunteers said it had been an "eyeopener" to see the deprivation of some children and described the experience as "humbling". Many said that the workshops were tiring and made them respect the work of teachers enormously:

'I tip my hat off to teachers, honestly'.

Mostly, volunteers felt good for doing it and described the experience as "inspiring" and "rewarding". They often recalled moments from the sessions, including how wonderful children are, how knowledgeable they can be, and that they felt the workshops had helped the children:

'By the time you leave, you are all beaming. They're just smiling, you're laughing, you're recalling, you know, memories of things that have happened through the day that are just funny... I was really surprised about the level of intellect that comes out of these children at such a young age.'

Some volunteers from financial organisations also reflected that the experience had made them more aware of the need to communicate in an accessible and engaging manner to customers and consumers. For instance, one respondent said their organisation had a big drive to make their materials more accessible. This was not necessarily driven by Change the Game, rather it had been one of their motivations to sign up to Change the Game in the first place, as helping deliver the workshops felt like a natural part of this ambition.

7.3.6 How can the programme be run more efficiently and effectively?

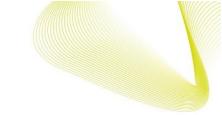
While participants were overwhelmingly positive during interviews and in survey responses, they also offered suggestions for how the programme could be further improved. However, it should be noted that these suggestions may not necessarily be supported by most, or even the majority, of participants but rather have only been suggested by some.

7.3.6.1 More activities

One of the most common suggestions was to increase the amount of Change the Game activities on offer and more frequently throughout the year. Some respondents thought, in particular, that more volunteer-led input could be beneficial. Other respondents thought sessions could be longer, for instance allowing more time for reflections and learning at the end of sessions after the completion of activities. It should be noted that Change the Game activities will be expanded in subsequent years, not through additional workshops and schoolbased activities every year, but through the rollout of the bank app and shop.

7.3.6.2 More inclusive resources

There was some indication that further differentiation of resources and content could be useful in engaging the full range of pupils. Some teachers suggested that SEN inclusivity could be



improved and that a wider range of real-world examples could engage students from different backgrounds.

7.3.6.3 More focus on home-based learning

Some teachers suggested that interaction with parents and children's home lives would be an important part of any intervention that aimed to improve financial literacy, because this is where financial habits are displayed to children.

'You know, they need to be given change, they need to be doing it practically at home. There's only so much we can do in school because we're not the ones who have the money.'

Some teachers suggested to involve parents and incorporate home-learning more in the programme. In addition to the current provision of home learning resources, some teachers suggest involving parents actively in the workshops, to ensure the engagement continued beyond the school gate.

7.3.6.4 Ensure that all teachers are active during workshops

Volunteers described how teachers, in the vast majority of cases, were active during workshops, including by controlling and dealing with any behavioural issues, helping children with support needs, and selling the importance of the programme to their pupils. However, a few volunteers also provided examples of teachers who "sat at the back of the class". They said the session was still good, in part because of the skill of the RedSTART facilitator who often had a teaching background, but they emphasised that pupil engagement was better when teachers were engaged and took part.



8 Discussion of findings

8.1 Exploring overall impact

The statistically significant positive findings from the first year of the evaluation were somewhat unexpected given the multi-year nature of the programme. That Change the Game has had an impact on participating students after just one year of delivery, is a positive signal that the intervention will be impactful in its full multi-year form.

The size of impact we measured is analogous to other school-based financial education interventions, but Change the Game appears to represent a time-efficient approach to improving children's financial literacy, as it is relatively less intensive than programmes that achieve similar sized impacts.¹² The total time delivered to pupils who attended all activities was 2.5 hours for Year 3 students and 3 hours for Year 2 students.

Evidence gathered in the IPE can provide insight into how this outcome has been achieved. Surveys and interviews with teachers and volunteers consistently revealed that pupil engagement in the activities was very strong. Intuitively, the more that students were invested in the activities, the higher the likelihood that the learnings would be embedded. This may have been compounded by the excitement students felt towards Change the Game and the subsequent prominence of the programme within the treatment schools – because students wanted to talk about it beyond the sessions themselves, the activities may have had a more significant impact than more intensive, but less engaging, models.

It seems that the delivery model itself could have contributed to this as several teachers commented on how the use of external volunteers and engaging physical resources had raised the profile of Change the Game amongst their students. This led to ongoing conversations and repetition of the concepts, knowledge, and behaviours in students' day-to-day lives.

Some teachers also reported that they sought to embed some of the learnings into the wider curriculum which may have furthered the impact of the programme. The IPE indicates that this level of buy-in and engagement amongst school staff was made possible by the ongoing work of the RedSTART team. The programme was relatively burden free for teachers through

¹² Kaiser, T., & Menkhoff, L. (2020). Financial education in schools: A meta-analysis of experimental studies. *Economics of Education Review*, *78*, 101930. https://doi.org/10.1016/j.econedurev.2019.

a combination of careful planning and clear communication from RedSTART's regional managers.

The impact of the programme may also be explained by the high quality of the materials and the sessions themselves. Teachers and volunteers consistently praised the standard of the lessons they engaged with. Materials were largely accessible to students, and the physical activity and interaction at the centre of the sessions were viewed as effective tools for imparting knowledge to children with a wide range of abilities and previous knowledge.

8.2 Exploring each of the outcome measures

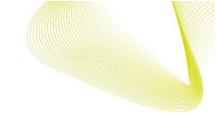
Our knowledge of the programme and the data collection approach can help explain the varied impact of the programme on the disaggregated outcomes.

8.2.1 No impact on the financial ability of students

Our IPE activities indicated that conversations during the sessions focused on the role of money in society. Financial ability is measured in the survey by questions that focus on how money operates in society, so it is somewhat surprising that no impact was found on this outcome. We will continue to monitor financial ability with interest as we would expect Change the Game to impact on it as its cumulative effect grows over the full intervention.

8.2.2 No impact on the financial behaviour of students

The lack of statistically significant impact on financial behaviour is potentially surprising as getting students to consider their spending and saving behaviours is a core part of the Change the Game activities. The questions in the survey that cover this outcome ask students to indicate how they would spend or save in different scenarios. Whilst we cannot offer conclusive analysis on this, the formulation of these questions may have had an impact on the findings. These questions, in comparison to the questions that measure the other disaggregated outcomes, are conceptually difficult. They ask students to imagine situations and then describe how they would act within them. This level of abstraction is not present in other questions. It may be, therefore, that difficulty in comprehending the question has contributed to the lack of impact measured as students may have been answering more randomly than elsewhere. Of course, it could also be the case that the intervention just did not affect this outcome amongst the participants. This would be consistent with other experimental studies in the field which generally find more significant impacts o



8.2.3 Positive impact on the financial connections of students

We found a positive impact of Change the Game on the financial connection of students. This was measured by asking students to indicate where they've learned about money and their connection to financial education. Given that the treatment students had been actively exposed to a financial education intervention that was delivered in school, along with take-home elements, it is perhaps not surprising that there was improvement in this measure.

8.2.4 Positive impact on the financial mindset of students

The questions that measure financial mindset are focused on savings behaviours and attitudes towards financial management. We know that this is a prominent focus of the Change the Game sessions so the positive impact on this measure is an encouraging sign for RedSTART and their approach.

school-based financial education on financial knowledge than financial behaviours.¹³

8.2.5 No impact on maths attainment of students

The lack of impact found on maths attainment is understandable in the context of the evidence gathered in the IPE. Respondents to surveys and interviews highlighted that any impact on maths attainment would likely take longer to emerge as the numeracy elements of the intervention were limited in comparison to the time dedicated to maths throughout the primary school year. Teachers did not think this was a weakness of the programme, but rather that numeracy was just not a key focus of the sessions. Going forward, the intervention is expanding to include a bank app that students will regularly use to complete maths quizzes and earn coins which they can save and invest. RedSTART staff are hopeful that this will lead to impact on maths attainment.

8.2.6 Few differential impacts for different groups of students

Our initial analysis of differentials in effectiveness of Change the Game by demography suggest that the benefits of the programme are fairly uniform across demographic groups. We looked at gender, ethnicity and eligibility for FSM. However, there is some evidence in the IPE that we may expect English as an Additional Language and Special Education Needs and Disability learners to be less impacted by the programme, as several teachers suggested that

¹³ Kaiser, T., & Menkhoff, L. (2020). Financial education in schools: A meta-analysis of experimental studies. *Economics of Education Review*, *78*,

children with these characteristics struggled to fully engage with the activities at times. We will investigate differences in effectiveness for these subgroups in subsequent years of the evaluation.

8.3 Sustainability and scalability

There were positive signs for programme sustainability in the IPE. A key factor that limits the sustainability of interventions in school settings is often the availability of staff time and the burden placed upon teachers by additional activities and programmes. This did not appear to be an issue for Change the Game as teaching staff consistently reported that accessing training and delivering the sessions added little to no burden to their day-to-day work. The model of delivery, which relies on RedSTART staff and volunteers leading sessions, was crucial to this, as was the careful curation and development of resources for the sessions that staff are given. As the programme expands and develops, maintaining this high level of staff buy-in will be crucial to sustainability.

The engagement of teaching and leadership staff is also important when considering scalability. Because it is relatively straightforward for schools to facilitate Change the Game, there are few barriers to new schools joining the programme. However, scaling the intervention is contingent on the resources that allow the current model of delivery to thrive. Most critical is the availability of volunteers and capacity of RedSTART regional managers who, between them, are responsible for much of programme delivery. Currently, the regional manager team works hard to deliver the service to schools so additional staffing would likely be necessary to reach more students. In many cases, the regional managers are also highly skilled, often having previously worked as teachers, and further scaling up will have to ensure effective recruitment and training.

Similarly, more volunteers would also have to be approached and trained to scale the intervention. The intervention is largely delivered in urban areas which have a relatively high concentration of organisations related to the finance world which RedSTART rely on for volunteers. If there was a desire to scale the programme to more rural areas, it could be more difficult to secure the appropriate staffing. Additional travel costs could also be incurred which could further impact scalability.

9 Conclusion

Δ

Overall, the evidence gathered in the first year of the evaluation suggests that Change the Game is an impactful intervention that can improve children's financial literacy. Our findings also support RedSTART's belief that early intervention in financial education is appropriate – children as young as six can meaningfully engage with the relevant material and improve their understanding of varied aspects of financial literacy.

Data collected from various stakeholders also indicates that RedSTART have developed an efficient delivery model that secures buy-in from teachers and leadership staff at school. There is good reason, therefore, to be optimistic about the ongoing long-term impacts of the programme as delivery is expanded and the intervention develops over the coming years.

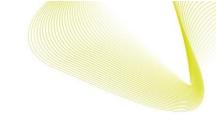
Based on our findings, we have come to the following conclusions that are relevant to policymakers and practitioners in the financial education field.

Children between the ages of six and eight can engage meaningfully with financial education and can benefit from interventions that aim to improve their financial knowledge. In particular, our findings indicate that game-based activities can improve students' understanding of financial concepts and impact their attitudes towards money and its role in society.

External organisations seeking to deliver programmes in schools should prioritise reducing burden for teaching and leadership staff as far as possible. Because of the wide range of competing priorities on staff and student time, buy-in among school staff is crucial to the successful delivery of school-based interventions.

Accessible resources and varied activities, such as those used by RedSTART, are linked to more time-efficient interventions; evidence gathered here suggests that lower intensity programmes can yield results that are comparable to higher intensity programmes.

Leveraging the interest that finance companies have in financial education to embed corporate volunteers into a delivery model is a pragmatic approach to create a well-resourced, engaging intervention.



10 Next steps

10.1 Accessing the National Pupil Database

In this updated report, we have integrated data accessed via the National Pupil Database (NPD) to complete sub-group analysis.

In future years, we will also collect attainment data (where applicable) from the NPD, to track longer term impacts of the programme. The ambition is that we can track the impact of Change the Game through a students' entire school journey, beyond primary school.

10.2 Cohort 1 and 2: Second year and onwards

The cohorts that have participated in the evaluation this year (whilst they were in Year 2 and 3) will continue to participate in the study until the end of primary school. They will complete surveys two more times before the end of primary school, once when they reach the end of Year 4, and once when they finish Year 6. Yearly reports will be published analysing the impact of the intervention across this period. When Cohort 1 and Cohort 2 finish primary school, they will have received four and five years of Change the Game activities, respectively. The Change the Game intervention is expanding to include a bank app which students will use during class time, for 15 minutes per week. In the app, they complete maths and financial literacy quizzes to earn virtual money, which can then be saved and invested, and subsequently spent on real items. This will increase the amount of time spent on Change the Game activities by students in treatment schools.

The evaluation and intervention activities that each cohort will participate in is detailed in Table 6 below (SBA are 'school-based activities' delivered by teachers):

Cohort	2022/23 (completed)	2023/24	2024/25	2025/26	2026/27
Cohort 1 (Year 3 in 2022/23)	Baseline survey Year 3 survey	Year 4 survey	No evaluation activities	Year 6 survey	N/A – finished primary school
	1x workshop 1x SBA	2x SBA Bank app	1x workshop 1x SBA Bank app	1x workshop 1x SBA Bank app	N/A – finished primary school
Cohort 2 (Year 2	Baseline survey Year 2 survey	No evaluation activities	Year 4 survey	No evaluation activities	Year 6 survey
in 2022/23)	1x workshop 1x SBA	1x workshop 1x SBA	2x SBA	1x workshop 1x SBA	1x workshop 1x SBA

Table 6: Cohort 1 and 2 Evaluation and Change the Game Activities

	Bank app	Bank app	Bank app

10.2.1 Cohort 3: Reception

In the second year of the evaluation (2023/24 academic year) we are also onboarding a new cohort. Cohort 3 is comprised of Reception students, taking part in Change the Game throughout all seven years of primary school - we aim to follow Cohort 3 for the entire period until they leave primary school. We have onboarded 17 new schools (plus three schools that initially had been unable to take part in the first year), for a total of 65 participating schools. We expect the research sample for Cohort 3 to be approximately 2,000-3,000 students. This expansion is an extremely exciting opportunity to complete a longitudinal study on a scale that is uncommon in school based RCTs.

Cohort 3's engagement with the research and programme activities will follow a similar pattern to Cohorts 1 and 2. It is summarised in Table 7 below.

Cohort	2023/24	2024/25	2025/26	2026/27	2027/28	2029/30	2030/31
Cohort 3 (Reception in 2023/24)	Baseline survey in Reception	No evaluation activities	Year 2 survey	No evaluation activities	Year 4 survey	No evaluation activities	Year 6 survey
	1x SBA	1x SBA	1x workshop 1x SBA	1x workshop 1x SBA	2x SBA Bank app	1x workshop 1x SBA Bank app	1x workshop 1x SBA Bank app

 Table 7: Cohort 3 Evaluation and Change the Game Activities

We have developed an innovative survey to measure Cohort 3's financial literacy in Reception. The development of this survey will be explained in detail when the second-year report is published in November 2024. In this report, we will also present an analysis of Cohort 3's baseline responses and impact analysis for Cohort 1, who will have undergone two years of the intervention by then and completed a third survey in summer term 2024.

The Policy Institute

The Policy Institute at King's College London works to solve society's challenges with evidence and expertise.

We combine the rigour of academia with the agility of a consultancy and the connectedness of a think tank.

Our research draws on many disciplines and methods, making use of the skills, expertise and resources of not only the institute, but the university and its wider network too.

Connect with us

@policyatkings

kcl.ac.uk/policy-institute