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RedSTART: Change the Game Evaluation Year 1

Summary Report

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February 2024



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Introduction

This report details the first year (out of seven) of our research into the impact of RedSTART's Change the Game programme – a financial education intervention for primary-aged children. The evaluation has been conducted by researchers at the Policy Institute at King's College London. This document is the Summary Report, alongside which we have published a full report.¹

Delivery

Over 3,500 students – in Year 2 and 3 (in England) and Primary 3 and 4 (in Scotland) – across 45 schools participated in the first year of the impact evaluation of Change the Game. The evaluation was a randomised controlled trial (RCT), with students in the treatment schools receiving Change the Game activities throughout the school year, whilst the control cohort did not.

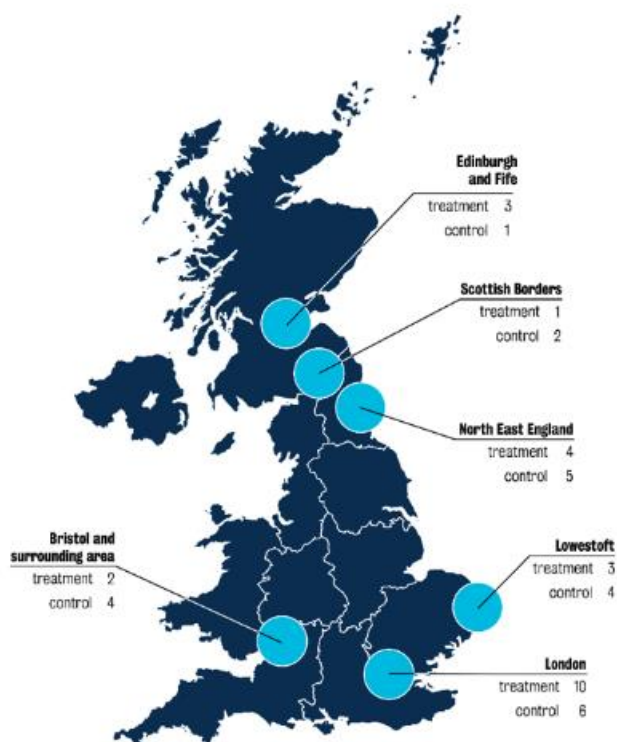
Findings

The impact evaluation found that Change the Game had a statistically significant small-to-medium-sized positive effect on children's financial knowledge, after one year of implementation.

It also found that the programme had a statistically significant positive impact on three out of five other outcomes. Students improved their financial ability, financial mindset and financial connection as a result of the intervention. No significant effect was found on the fourth (financial behaviour) or fifth outcome (teacher-assessed maths attainment).

Through interviewing and surveying teachers and senior leaders in schools, we found widespread buy-in to the programme. School 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.

Figure 1: Locations of primary schools involved in the research





Policy context

Importance of financial education

The first year of the study 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 financial outcomes of adults,² and that financial education received as a child affects financial capabilities later in life.³

Important steps have been taken in recognition of this. This year is the tenth anniversary of adding financial education to the national curriculum for secondary schools in England, and a range of financial and charitable organisations are delivering interventions across the UK.

But research shows that financial education is not equally accessed, with the worst-off less likely to access it than their wealthier peers.⁴ Provision is varied as schools are under little statutory obligation to provide meaningful financial education to all ages. Consequently, the young people that are growing up to face the greatest financial challenges are often the least well prepared to deal with them.

There is also a gap in the evidence base: there have not been large-scale, long-term studies into the impact of different financial education models and their various impacts on primary-aged children.⁵

Growing momentum among policymakers

In this context, policymakers across the spectrum are increasingly seeking to address these gaps. In 2021, the All-Party Parliamentary Group (APPG) on Financial Education for Young People recommended the expansion of provision and evidence generation in the sector, including longitudinal studies into the impact of financial education.⁶

At the end of 2023, the Education Select Committee launched an inquiry to strengthen financial education's presence in the national curriculum.

Our aim is to provide an evidence base for policymakers

The study presented here, and the Change the Game intervention itself, aims to address these gaps and provide actionable evidence to policymakers as they look to address the discrepancies in financial literacy in the UK.

Change the Game

Focus on disadvantaged pupils

The charity RedSTART works with schools in areas with high scores on the index of multiple deprivation. Part of their mission is to provide access to financial education for children and young people who are more likely to come across financial hardship later in life and give disadvantaged pupils a “head start on their financial futures.”⁷

Game-based activities in primary school

Change the Game is a novel 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 encourage pupils to engage meaningfully with them. These take place either in school or offsite at corporate partners’ offices.

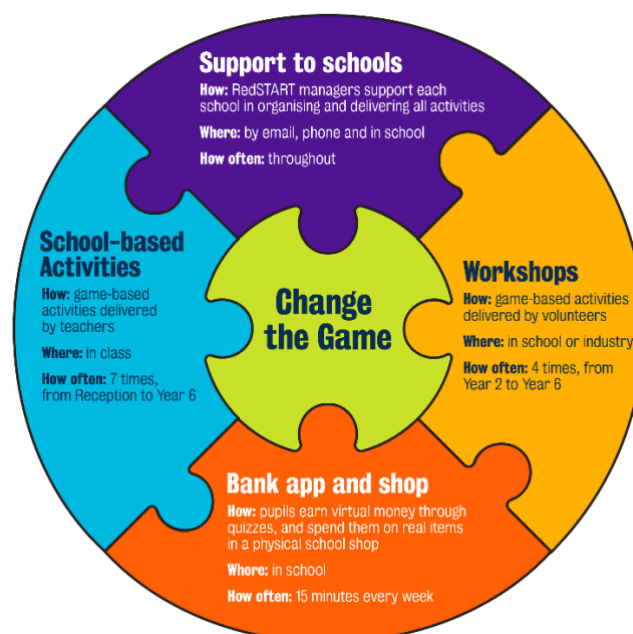
A bank app is currently being rolled out to participating schools, in which pupils earn virtual money through maths games, manage it through current and savings accounts, and spend them on real items in a physical school shop.

Intended outcomes

Change the Game focuses on improving students’:

- **financial ability** (their understanding of different financial concepts)
- **financial mindset** (their attitudes in relation to financial behaviours and the future more generally)
- **financial behaviours** (their actions relating to money and financial concepts like saving)
- **financial connection** (their access to financial education resources)
- **maths attainment** (their teacher-assessed maths grades, and later their Key Stage 1 and 2 maths results)

Figure 2: The four core components of Change the Game



Methods

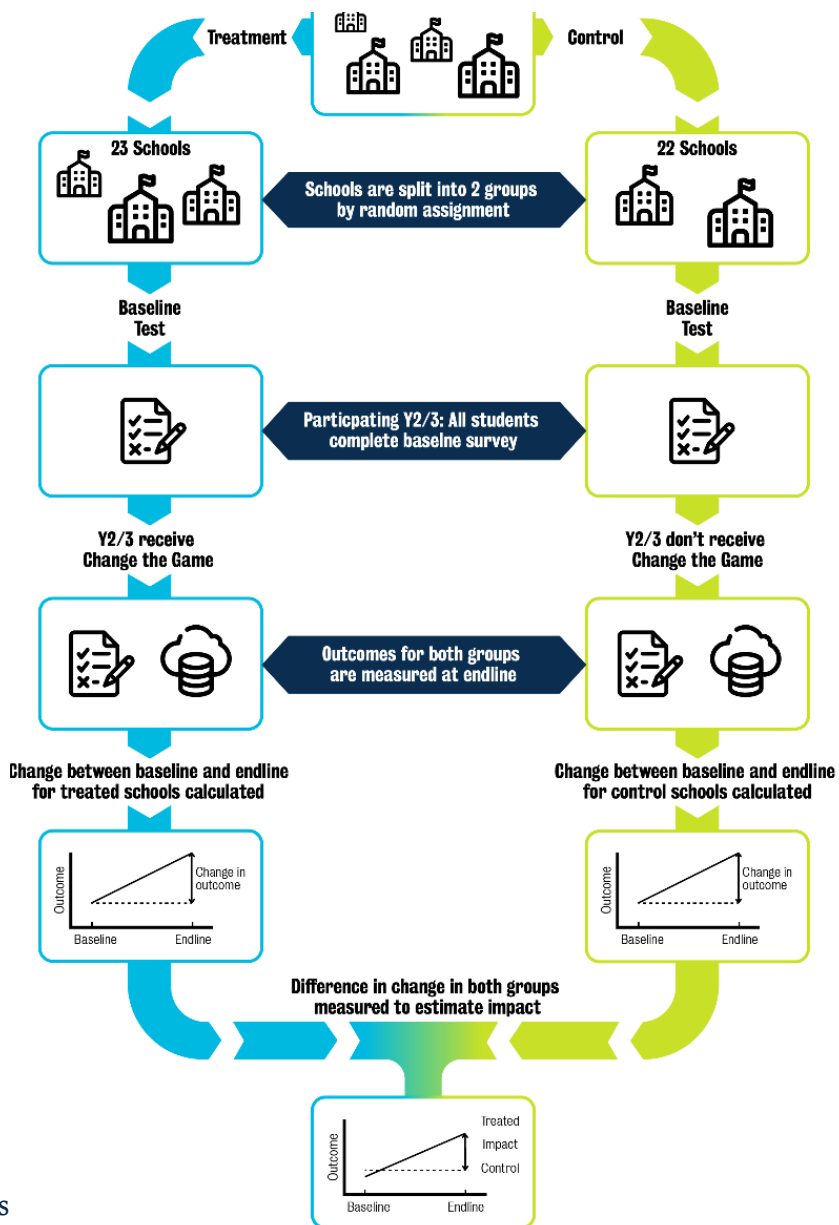
Over 3,500 Year 2 and Year 3 students across 45 schools took part in the first year of the evaluation. The impact evaluation, a randomised controlled trial (RCT), has investigated the effect of Change the Game on pupils' financial knowledge. The participating schools were randomly allocated into two 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.

We measured Year 2 and 3 students' financial knowledge using a survey scale that was developed for the purpose of this research. Students completed the survey twice, either a paper or online version: before the intervention was delivered, and afterwards, at the end of the 2022/23 school year. The average changes in these scores were compared between the treatment and control group to give an estimate of the impact caused by Change the Game.

We also interviewed and surveyed programme staff, school staff and volunteers to understand how the programme was delivered, what factors have helped or hindered its implementation, and to answer broader

questions around programme sustainability and scalability.

Figure 3: How we designed the evaluation to measure impact



Findings

Pupil outcomes

The impact evaluation found that Change the Game had a statistically significant, small-to-medium, positive effect on pupils' financial knowledge, as measured by 9 items in a financial literacy survey. After one year of exposure to the treatment (which is intended to be a multi-year


intervention) the average score for treated pupils had improved by 3.56%, which is equivalent to an effect size (Cohen's d) of 0.26. This effect size is in keeping with effect sizes of other financial education interventions with other cohorts. One meta-analysis of 18 randomised controlled trials in the sector found interventions had an average effect size of 0.19 (Hedge's g).⁸

Table 1: Summary of impact of Change the Game

The intervention also had a small but

| Outcome | Measure | Year 1 Impact |
|-----------------------------|---|----------------------------------|
| Financial knowledge | 9 survey questions related to: | |
| | <ul style="list-style-type: none"> • 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 | +3.56% Small-to-medium effect |
| Financial ability | 2 survey questions related to: | |
| | <ul style="list-style-type: none"> • Understanding of money management • Understanding of role of money in society | +3.16% Small effect |
| Financial mindset | 7 survey questions related to: | |
| | <ul style="list-style-type: none"> • Attitudes to money management • Confidence in maths skills • Aspirations and goals | +2.34% Small effect |
| Financial behaviours | 2 survey questions related to: | |
| | <ul style="list-style-type: none"> • Skills to manage money well day-to-day | No impact |
| Financial connection | 1 survey question related to: | |
| | <ul style="list-style-type: none"> • Access to financial education resources | +5.26% Small effect |
| Maths attainment | Teacher-assessed grades | No impact |

statistically significant, positive effect on



three disaggregated outcomes; pupils' financial ability, mindset, and connection were all improved, on average, by engaging with Change the Game.

No significant impact was found on financial behaviours as measured by the survey or on end of year teacher-assessed maths grades.

Interviews and surveys with programme staff, school staff and volunteers

We found that the programme has strong support amongst teachers and senior leaders. They consistently indicated their satisfaction with the resources they received as part of the intervention, reported that activities were engaging and broadly accessible, and were generally impressed with the contributions of the corporate volunteers and RedSTART staff.

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

The strong buy-in amongst teachers, as well as volunteers, 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 improve the learning activities (by improving the staff-student ratio) whilst introducing students to adults from varied walks of life who could share insights they may not otherwise access.

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

Limitations of the evaluation

There are some limitations to be mindful of. The analysis for this report was done without access to the National Pupil Database (NPD). We expect to secure access in Spring 2024. As we have secured consent from parents and guardians to use this, we will then collect further attainment and demographic data of the participants and provide an update to this report. This will include more detailed sub-group analysis; for example, we can investigate whether the intervention has a differential impact on pupils from different socioeconomic backgrounds or ethnic groups. The demographic data will also allow us to add more detailed controls into the primary analysis, adding greater validity to the findings.

Another potential limitation is that data was collected somewhat inconsistently as teachers, rather than the research team, collected primary data via surveys. Nonetheless, we are confident that the first year of the trial has been completed robustly and that the reported effect represents the actual impact of the Change the Game intervention.



Discussion

Why did we find an overall positive impact on financial knowledge?

The statistically significant, positive impact 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 an extremely positive signal that the intervention will be impactful in its full multi-year form.

The size of impact we measured is analogous to other interventions in this field. However, other programmes that achieve similar effect sizes are often more intensive,⁹ meaning Change the Game appears to represent a time-efficient approach to improving children's financial literacy.

Evidence gathered in the research can give some insight into how this outcome has been achieved. Throughout the surveys and interviews with teachers and volunteers, it became clear that pupil engagement in the activities was very strong - this could increase the likelihood that lessons learned in short periods of time would be embedded by students. This enthusiasm may have been compounded by the excitement students felt towards Change the Game and the subsequent prominence of the programme – because students wanted to talk about it beyond the sessions themselves, the activities may have had a longer-lasting impact.

It seems that the delivery model 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.

'[Our students] 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.'

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.

Why did we find a positive impact on some measures, but not others?

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

Positive impact on financial connection

The financial connection of students was measured by asking students to indicate where they've learned about money and their connection to financial education. As the treatment students had been actively exposed to a financial education intervention that was delivered in school and had take-home elements, it is perhaps

not surprising that there was improvement on this measure.

Positive impact on financial mindset

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 a positive impact on this measure is an encouraging sign for RedSTART and their approach. Teachers had also observed these impacts during sessions, for instance on attitudes to savings:

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

Positive impact on financial ability

Similarly, our interviews and surveys with teachers indicated that a lot of the conversations during the sessions focused on the role of money in society, and these conversations often seem to have continued beyond the sessions. This is reflected in the positive impact on financial ability, which is measured by questions that focus on how money operates in society.

No impact on financial behaviour

The lack of 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 – other research suggests it is easier to affect financial knowledge than financial behaviours.¹⁰

No impact on maths attainment

The lack of impact on maths attainment is understandable in the context of the evidence gathered through interviews and surveys with teachers. Respondents 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.

‘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.’

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 an impact on maths attainment.

Sustainability and scalability

We observed positive signs for programme sustainability during interviews and surveys with teachers. 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.

'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.'

This was made possible by the ongoing work of the RedSTART team who made the programme easily accessible through a combination of careful planning and clear communication.

'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.'

As the programme expands and develops, maintaining this high level of staff buy-in will be crucial to sustainability.

'Having [the RedSTART staff] to touch base with has been fantastic...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.'

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 the programme delivery.



Conclusion and next steps

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

Data collected from stakeholders also indicates that RedSTART have developed

a delivery model that secures buy-in from teachers and leadership staff at schools. There is reason to be optimistic about the ongoing impact 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 (Table 2) that are relevant to policymakers and practitioners in the financial education field.

Table 2: Summary of conclusions

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

Next steps

The evaluation 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 delivery. To increase the size of the reception cohort, 17 additional schools have joined the study, for a total of 65 schools. Going forward, we

will track these students throughout their primary school years to measure the impact of the entire Change the Game seven-year intervention. We will also continue to track the two cohorts who have participated in the first year of the evaluation, with further outcome measures collected when they reach Year 4, Year 6, and beyond. Reporting will proceed on a yearly basis.



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