

What Works for Financial Education

The Impact of Training Teachers in Financial Education on the Financial Capability of the Students they Teach

Prepared for Young Money

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Executive summary

Background

The 'What Works for Financial Education' (WWFE) project aims to ascertain to what extent training teachers to plan and deliver financial education impacts on the financial capability of the young people they teach. The project focuses specifically on post-16 learners (KS5) and their teachers in schools in England, a group that has previously not been a focus in financial education teaching.

Evaluation approach

The key outcomes assessed are: (1) teachers develop confidence in teaching financial education and further develop their pedagogical practice, and (2) students increase their financial capability.

The research design comprised a three-armed randomised controlled trial among teachers teaching financial education to young people aged 16+ in 126 schools and colleges in England. The intervention consisted of Young Money's teacher training in the following five themes: (1) Fraud and identify theft; (2) Financial planning and budgeting; (3) Financial implications of work; (4) Seeking financial advice; (5) Choosing financial products.

Teachers from a random sample of 60 schools (Treatment group) and 6 Centres of Excellence (COE) schools received the teacher training. Teachers from a further random sample of 60 schools (Control group) did not receive the training. Teachers in all groups, including the Control group, were given free access to Young Money's Financial Education Subscription Service to support their financial education teaching. Teachers in all groups then delivered financial education to their students over one term.

The evaluation took place between September 2017 and February 2018 and comprised a mixed methods approach including quantitative (survey) data and qualitative (interview and focus group) data. This enables a deeper understanding of the changes that have taken place by capturing a wide range of perspectives, and allows us to triangulate our findings. Matched pre- and post-surveys were completed by 101 teachers and 1,215 post-16 students from 93 of the 126 schools. Individual interviews were conducted with 20 teachers, six focus groups were conducted with post-16 students, and a survey and focus group was conducted with all eight consultants that delivered the training.

Key findings

Overall, the analysis confirms that training teachers to teach financial education does have a positive impact on teachers' confidence and pedagogical practice:

- Teachers that took part in the training were more confident in delivering financial education lessons and in evaluating the effectiveness of them, compared to teachers who had not been trained.
- The training had a positive impact on teachers' pedagogical practice, in particular, leading to increased use of technology in financial education lessons and consideration of students' religious and cultural characteristics, ensuring a

greater likelihood that financial education lessons are tailored to the needs and characteristics of students.

Key teacher characteristics, such as length of teaching experience, prior experience of financial education teaching and teacher's motivation for teaching financial education influence the impact of the training and the effectiveness of financial education:

- The teacher's length of service influences the degree of impact of teacher training. The greatest impact is seen in teachers with less than 10 years' experience (compared to those with more than 10 years' experience). This is particularly evident for confidence in delivering financial education and in the use of technology. This suggests that for training to have the optimum impact, it is best provided to teachers in the early to mid-career stages.
- The teacher's prior experience of financial education teaching also partially influences the impact of training. The training has the greatest impact on confidence in delivering financial education, regardless of prior experience. However, the training has the greatest impact on confidence in designing financial education lesson plans and tailoring financial education to students' among those teachers with prior experience of financial education and who feel confident in delivering financial education. This suggests that building confidence in financial education teaching is a continuing process. Training can deliver immediate benefits in building confidence in delivering financial education, but confidence in designing lesson plans and tailoring it to students' needs requires putting the training into practice to build further confidence through experience and ongoing support.
- Teacher motivation is important as much of the current financial education delivery depends on teachers' enthusiasm, interest and willingness to deliver. However, the analysis indicates that interest and motivation alone are not sufficient to deliver effective financial education, and can in fact have a negative impact on financial capability outcomes. Hence, motivation needs to be channelled appropriately through training. Teachers recognised the need for support to develop appropriate expertise.

Teachers appreciated access to resources and training. The provision of resources alone goes some way to improving teacher confidence and student outcomes:

- Use of good quality financial education resources, without training, does deliver benefit in targeted areas in terms of increasing both teacher and student confidence. Teachers in the Control group seemed to make as much use of the resources as teachers in the Treatment group, which possibly accounts for the improvements observed in the Control group.
- Teachers are busy and appreciated the access to resources and teaching materials that they could adapt for their purposes, although, they found it time-consuming developing appropriate teaching materials from the resources and hoped for more complete lesson plans. They generally perceived the resources to be effective, although they did not always find the resources appropriate to post-16 students. The availability of good quality resources is essential.
- Teachers welcomed the training and enjoyed it. They liked the structured, themed approach. Those teachers that had taken part in the training were able

to make more effective use of the resources and reported that they developed lesson plans more efficiently.

The training had less impact overall on the Centres of Excellence schools:

- The training has had relatively less impact on the confidence and teaching practice of COE teachers, largely due to those teachers having more experience of financial education at the start of the project through their involvement in the Centres of Excellence programme. The starting point on some aspects was as high as the end point achieved by those after training.

The analysis also confirms that training teachers to teach financial education has a positive impact on the financial capability outcomes of the students they teach.

- Students that have been taught by teachers trained in financial education are significantly more confident in managing money. The effect of the training has had the impact of increasing post-16 students' confidence managing money to a level comparable with the 18-24 year old young adult demographic (based on the UK Financial Capability Survey 2015). Increasing the level of financial capability of school leavers in this way ensures they are better equipped to deal with the key transitions and financial implications they are about to encounter as young adults.
- The effect of the training can be seen in all five themes, particularly strong in the themes of fraud and identity theft, seeking financial advice and choosing financial products. The effect of the training is less obvious in the themes of financial planning and budgeting and financial implications of work. Insights from the qualitative analysis suggest that these themes have received more attention by schools in previous financial education. A recent mapping of financial education provision by the Money Advice Service across the UK in all settings, including schools,¹ highlights budgeting, keeping track of money and making spending choices are among the topics most covered in financial education, whereas choosing financial products (such as mortgages, insurance, investments) fraud and exploitation are among the least covered. This may be a contributing factor to the positive impact of the training on the themes fraud and identity theft and choosing financial products, as teachers potentially lack expertise in these areas.

Student factors (such as gender) and school factors (such as free school meals and relative deprivation, based on IMD) influence the degree of impact of the training on student financial capability outcomes:

- The effect of the training is influenced by student gender. Female students (taught by trained teachers) demonstrate lower confidence in relation to protecting themselves from fraud and identity theft. Male students (taught by trained teachers) demonstrate lower confidence in relation to knowing where to seek help with advice. Wider research evidence highlights potential under- and over-confidence of females and males respectively. These findings suggest a potential re-calibration of over-confidence of males prior to the intervention,

¹ Money Advice Service, Children and Young People Commissioning Plan Stakeholder Workshop, 1st May 2018

based on more accurate information provided by teachers who have been trained.

The training has a positive impact on students' financially capable behaviours:

- Students that were taught by teachers that took part in the financial education training were much more likely to have made changes to the personal information they share online, engaged in saving, and sought advice on student loans.

Overall, the project provides evidence that teacher confidence and pedagogical practice and the financial capability of the students they teach increase relative to the degree of support provided to teachers:

- The greater the support and training provided to teachers, the greater the improvement in teacher confidence in financial education and pedagogical practice. Also, the greater the support and training provided to teachers, the greater the improvement in students' financial capability outcomes.
- The Control, Treatment and COE groups represent a tiered approach to supporting and developing financial education from (1) access to resources alone (Control group), resources and training (Treatment group), and being part of an ongoing programme of support through the Centres of Excellence (COE group).

Limitations

The main limitations of the project were the timeframe that inhibited some schools from fully participating and led to drop-outs throughout the process, resulting in a reduction in data as the evaluation depended on teachers and schools completing pre- and post-surveys. Some schools were unable to deliver their financial education during the short timeframe and, despite otherwise participating in the project, could not be included in the evaluation due to missing post-surveys.

Learning and sharing activity

Learning from the project has been shared widely at events and via key stakeholder networks in both England and Scotland. Further activity is planned to share the learning with teachers and stakeholders via published materials, summary findings and events.

Recommendations

There are significant benefits to considering the wider roll-out of teacher training in financial education according to a set, consistent curriculum. There are various ways in which this could be considered, as ongoing Continued Professional Development (CPD) for qualified teachers, embedded in Initial Teacher Education programmes for newly qualified teachers, or via ongoing support. A tiered approach to supporting financial education would seem appropriate that includes access to good quality resources, initial teacher training or early-career training in financial education and ongoing support and development via a programmatic approach, such as via the Centres of Excellence programme.

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1. Overview of project

The 'What Works for Financial Education' (WWFE) project aims to ascertain to what extent the financial capability of young people can be enhanced through training teachers to plan and deliver financial education.

The project focuses specifically on post-16 learners (KS5) and their teachers in schools in England. The post-16 age group has been recognised as most in need of financial education (MAS, 2016)² although previously has not been a key focus in schools. The project also responds to the APPG (2016)³ report on financial education in schools that concludes that much more support is needed to strengthen the delivery of financial education in schools, in particular through improving teacher confidence and skillset.

The project represents an extension of the teacher training that Young Money⁴ provides. Young Money has extensive experience in providing teacher training, both for Initial Teacher Trainees and experienced teachers across subject areas, however post-16 students and their teachers have not specifically been targeted in previous programming. In addition, while Young Money has extensively evaluated the impact of teacher training on the teachers themselves, they have never before been able to evaluate the impact that teacher training has on the students that the teachers go on to teach. This project therefore provides valuable new evidence of the impact of teacher training on students as well as teachers.

The research design comprises a three-armed randomised controlled trial among teachers teaching financial education in schools and colleges in England. The three groups are made up of: teachers who received the teacher training (Treatment group); teachers who did not receive the teacher training (Control group); teachers taking part in Young Money's Centres of Excellence [COE] programme who also received the training (COE group). Both the teacher training group and the COE group make up the treatment group, although there is no separate control group specifically for the COE group. The groups also take into account a range of teacher experience (according to length of service) and socio-economic factors, such as the English Index of Multiple Deprivation (IMD 2015),⁵ a measure of relative deprivation of areas, specifically focusing on IMD 1-3, the 30% most deprived areas.

The intervention consisted of Young Money's Continued Professional Development (CPD) teacher training in the following five themes:

1. Fraud and Identify theft
2. Financial planning and budgeting
3. Financial implications of work
4. Seeking financial advice
5. Choosing financial products.

² T. Harrison, C. Marchant and J. Ansell (2016), Young Adult Financial Capability, Money Advice Service: London

³ All Party Parliamentary Group on Financial Education (2016), Financial Education in Schools: Two Years On – Job Done?

⁴ Young Money (formerly Pfeg), supports all educators in developing the financial capability of the young people they work with. We are a trusted and valued provider of knowledge, resources and training to anyone teaching children and young people how to manage money. Young Money is part of the national charity, Young Enterprise. Young Enterprise equips young people with the skills, knowledge and confidence they need to succeed in the changing world of work.

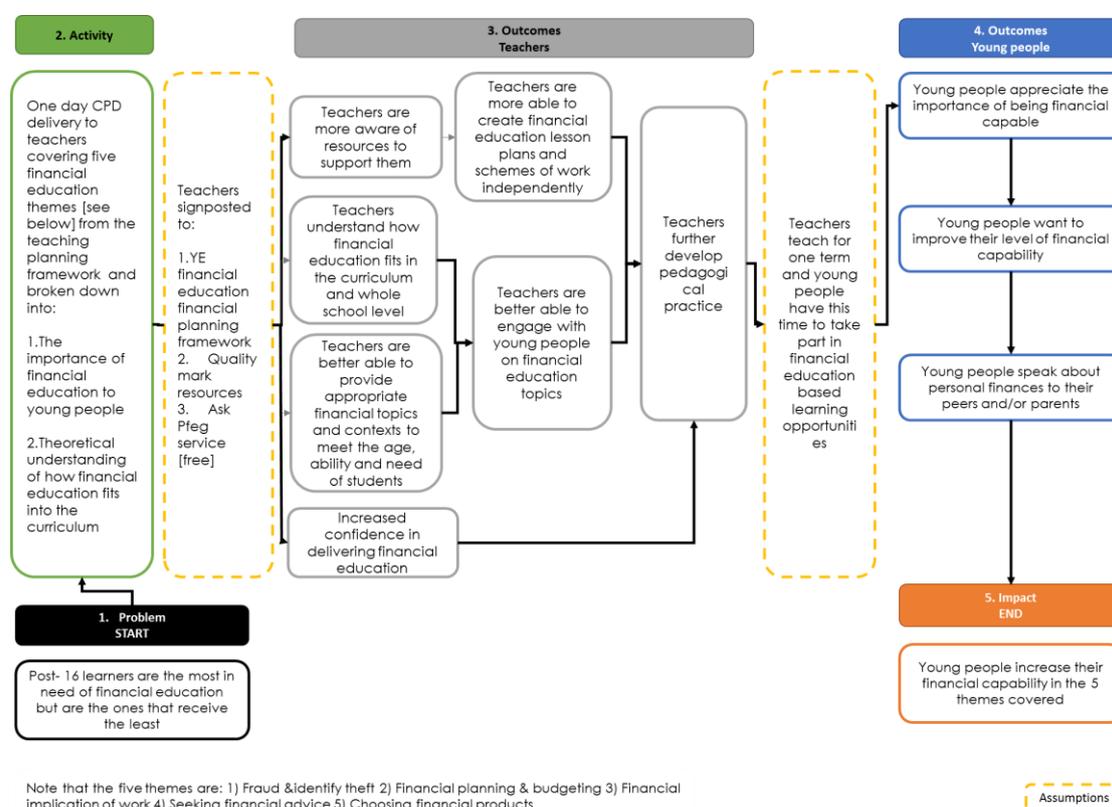
⁵ <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

Teachers in all groups, including the Control group, were given free access to Young Money’s Financial Education Subscription Service to support their financial education teaching.

Teachers in all groups then delivered financial education to their students over one term. All students that received the financial education (in Treatment, Control and COE groups) were asked to complete both pre- and post-surveys aligned to the Money Advice Service Children and Young People (CYP) outcomes framework and the five themes from the teacher training. Teachers in the Control group received training once the project and evaluation had been completed.

The overall aim of the project was to ascertain the extent to which training teachers to plan and deliver financial education impacts on the financial capability of the young people they teach. Figure 1 illustrates the Theory of Change being tested in the project.

Figure 1: Theory of change



2. Overview of evaluation approach

The evaluation addresses the following primary research question:

- To what extent does training teachers to plan and deliver financial education impact on the financial capability of the young people they teach?

In addition, the evaluation seeks to address the following secondary questions:

- To what extent does teacher training enable teachers to use financial contexts more effectively?
- To what extent do teachers perceive the training and intervention resources to be effective?

3. To what extent do teachers develop confidence in teaching financial education through teacher training?
4. Does the financial capability of young people increase relative to the degree of teacher support?
5. Does the teacher's length of service influence the degree of impact of teacher training and thereby;
6. Does the varying impact of teacher training impact on young people's financial capability?

The financial capability outcomes measured align with the MAS outcomes framework, and additionally align to the five themes underpinning the intervention:

1. Fraud and Identify theft
2. Financial planning and budgeting
3. Financial implications of work
4. Seeking financial advice
5. Choosing financial products.

We use a mixed methods approach drawing on quantitative (survey) data and qualitative (interview and focus group) data. This enables a deeper understanding of the changes that have taken place by capturing a wide range of perspectives and allows us to triangulate our findings.

We evaluate the trial outcomes primarily using a difference in difference approach, based on the size of difference between the Control and Treatment groups at two points in time. This is achieved via individually matched pre- and post-survey scores for teachers and students in each of the trial groups, and supplemented by qualitative data from teachers and students. The quantitative data enables us to answer the question of what has changed following the intervention, whereas the qualitative data enables us to understand potentially why and how. Additional quantitative insights are provided via regression analyses to ascertain the potential impact of other explanatory variables (such as teacher, student and school characteristics) that may also help explain differences observed.

We also gathered qualitative and quantitative data from trainers involved in the delivery of financial education training to teachers. This enables us to evaluate the appropriateness of the training and the resources, and provides further insight into teachers' reactions to the training. An overview of the research methods in relation to the project outcomes is shown in Appendix 2. A detailed analysis of the qualitative research is provided in Appendix 5, and a summary of the findings from the trainer research can be seen in Appendix 9.

2.1 Project participation

The target number of schools was 126 (60 from the Treatment group, 60 from the Control group and 6 from the Centres of Excellence). The final numbers that fully participated in the evaluation were: 46 Treatment schools, 41 Control schools and 6 Centres of Excellence schools; a total of 93 schools. This is based on full participation in the evaluation, including participation in training (for the treatment group), participation in the pre- and post-surveys for teachers and students in all groups, and delivery of financial education for all groups. Appendix 3 provides an overview of the

final participation of schools achieved in the project evaluation, with an explanation for the change in numbers.

Although the number of schools involved in the evaluation was lower than expected, to our knowledge, the overall number of 93 schools represents the largest number of UK schools to date involved in a randomised controlled experiment to evaluate the impact of financial education. Attrition in randomised control trials is common. The commitment expected of teachers in this project was significant. Despite that, the attrition level of 26% is consistent with attrition rates observed and reported in other studies⁶. Importantly, the attrition levels have not had an adverse effect on data collection; we have maintained a good balance of schools and teachers particularly across the Treatment and Control groups and gathered sufficient data to allow the project to achieve its' original outcomes and impact. Appendix 4 provides a detailed overview of the teacher, student and trainer data collected by each research method.

3. Key findings

3.1 Teachers

Sample characteristics

A total of 101 pre- and post-surveys matched at the individual teacher level were achieved across all the Treatment, Control and the Centres of Excellence (COE) schools. Most of the teachers in the sample have more than 10 years' experience in teaching (68 teachers); 27 teachers have 4-10 years' experience (Figure 2). Only five teachers in the sample had three years or less teaching experience. For analysis purposes, we combined the groups 0-3 years and 4-10 years, to make two groups: 10 years' or less experience and 10+ years' experience.

Figure 2: Teacher sample characteristics (number of teachers)



Treatment and Control groups

The results reported in this section focus on the Treatment and Control groups only, a total of 87 teachers: 46 in the Treatment group and 41 in the Control group. Due to the

⁶ In a review of 71 randomised controlled trials in four top medical journals, dropout rates of 20% or more were observed in 18% of the trials (cited in Bell et al. 2013).

small number of teachers (14) in the COE group, this group has not been included in the direct statistical comparisons. A separate descriptive commentary on the COE group is provided at the end of this section.

We conducted analysis according to three approaches:

1. We used paired samples t-tests to explore statistically significant changes within each of the groups in terms of the difference between pre- and post-surveys.
2. We used a difference in difference approach (using independent samples t-tests) to assess the differential effect of the teacher training on the Treatment group compared to the Control group.
3. We also considered other potential explanatory variables (such as individual teacher and school characteristics) that may have had an impact on any of the observed differences. This was conducted using General Linear Model analysis, a form of regression analysis. The additional factors considered in the teacher analysis included:
 - a. Teacher's teaching experience (measured according to teacher length of service: (10 years or less; 10+ years)
 - b. Teacher's financial education experience (measured from the pre-survey according to whether teachers had previously delivered financial education to their students)
 - c. Teacher's confidence in teaching financial education (Based on a composite variable comprising the post-survey questions on confidence in designing financial education, delivering financial education and delivering tailored financial education to students' needs. The items were reduced to a single component using Principal Component Analysis, accounting for 80.5% of the variation in the original three items)
 - d. Teacher's motivation to teach financial education (Based on a single component derived from four questions in the post-survey that measured the extent to which teachers feel that financial education is interesting, important, relevant and exciting. The single component was produced using Principal Component Analysis and accounted for 63.8% of the variation in the original four items)
 - e. English Index of Multiple Deprivation (IMD) (an external measure) applied to the geographic location of the school and providing an indicator of potential social and economic disadvantage.

Outcome: Teachers further develop pedagogical practice

In terms of the development of pedagogical practice, we looked at:

- teachers' use of external financial education resources
- teachers' use of technology for financial education delivery
- the extent to which teachers considered their students' cultural, religious and socio-economic background in financial education lesson planning

We also looked at where in the curriculum financial education had been delivered.

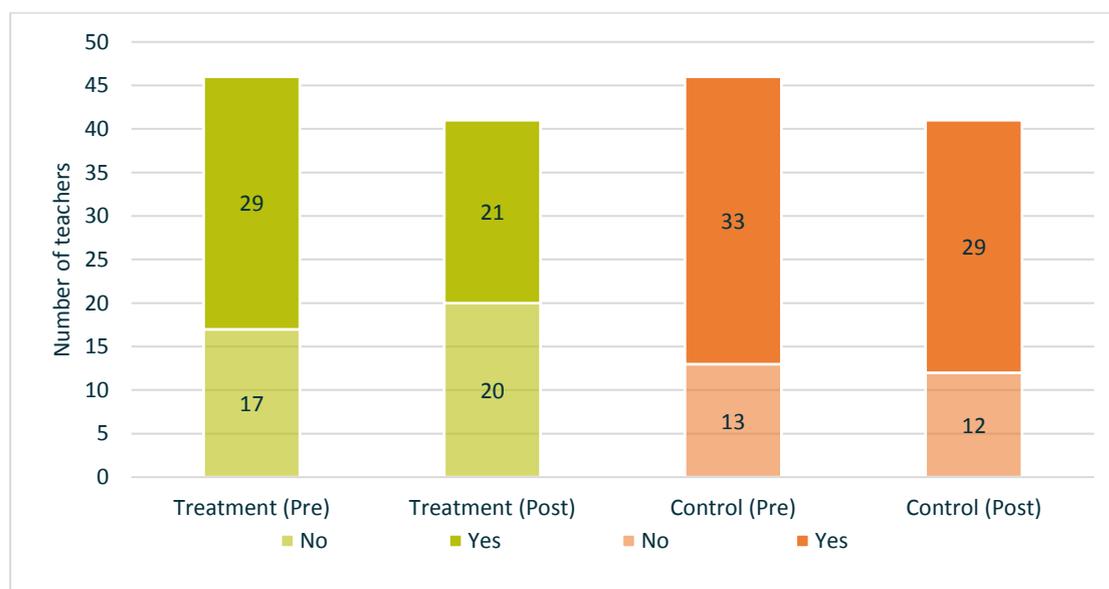
Accessing and using financial education resources

As part of the project, all teachers in both the Treatment and Control groups were given the option to sign up to the Financial Education Subscription Service free of charge. Almost all the teachers in both the Treatment and Control groups signed up to the service: only two of the 46 teachers in the Treatment group did not sign up and only five of the 41 teachers in the Control group did not sign up.

In both the Treatment and the Control groups at least half the teachers had accessed a directory of financial resources (Figure 3), with slightly more in the Treatment group accessing the resources (29 out of 46 teachers in the Treatment group, compared to 21 out of 41 teachers in the Control group). The difference between the groups in terms of their likelihood to access a directory of financial resources was not statistically significant.

Similar proportions of teachers (7 in 10) within both the Treatment and Control groups had downloaded financial education learning activities from external agencies: 33 of the 46 teachers in the Treatment group compared to 29 of the 41 teachers in the Control group.

Figure 3: Have you accessed a directory of financial resources or downloaded financial education learning activities from external agencies?



The main difference between the Treatment and Control groups in terms of use of resources is in the use of Financial Education Quality Mark resources⁷. Teachers in the Treatment group were more than twice as likely to use Quality Mark resources as teachers in the Control group: 18 teachers in the Treatment group compared to 6 in the Control group.

⁷ The Financial Education Quality Mark is the UK's only widely-recognised accreditation system for financial education resources, provided by Young Money (formerly Pfeg). The Quality Mark is designed to give educators confidence that the financial education materials they are using are of the highest educational value, contain accurate and up-to-date information and are engaging and relevant.

Overall, teachers in both the Treatment and Control groups accessed and used financial education resources to a similar extent, with the exception of Quality Mark resources that were used to a greater extent by teachers in the Treatment group. This is likely to be an impact of the training, as the Quality Mark resources were highlighted to teachers in the training. However, it is important to note that similar proportions of teachers in both the Treatment and Control groups used the financial education resources that were made available to them during the project. Many of the improvements observed in the Control group below are likely due to having accessed and used resources to aid the teaching of financial education, that teachers would not have had access to prior to the project. As one teacher commented:

‘Things like that are a godsend for teachers ... anything that we don’t have to create from scratch ourselves because that’s time consuming. And especially if you’re not an expert in it because it involves a lot more research’

Use of technology in financial education teaching

The training has had a positive impact on the use of technology as part of financial education delivery among those teachers in the Treatment group, although the improvement observed is not large enough to be statistically different from the Control group.

Appendix 6, Table 1 shows a statistically significant difference between pre- and post-intervention at the 1% level ($p=.001$) in the Treatment group, whereas the change in the Control group is not statistically significant. In terms of the difference in difference between the Treatment and Control groups, this is not statistically significant at the 5% level ($p=.096$).

Figure 4 shows that the number of teachers in the Treatment group that had used technology either ‘most of the time’ or ‘all of the time’ as part of financial education delivery increased by 12 teachers to 27 of the 46 teachers after the training. 16 teachers in the Treatment group had not used technology as part of financial education delivery at the start of the project, but only one of these had not made any use of technology by the end of the project. Teachers in the Control group had made more use of technology for financial education at the start of the project; 21 of the 41 teachers in the Control group had used technology most or all of the time. At the end of the project this had only increased slightly to 27 teachers. There were 4 teachers in the Control group that had not made any use of technology at the start of the project and had still not made any use of technology in financial education by the end of the project.

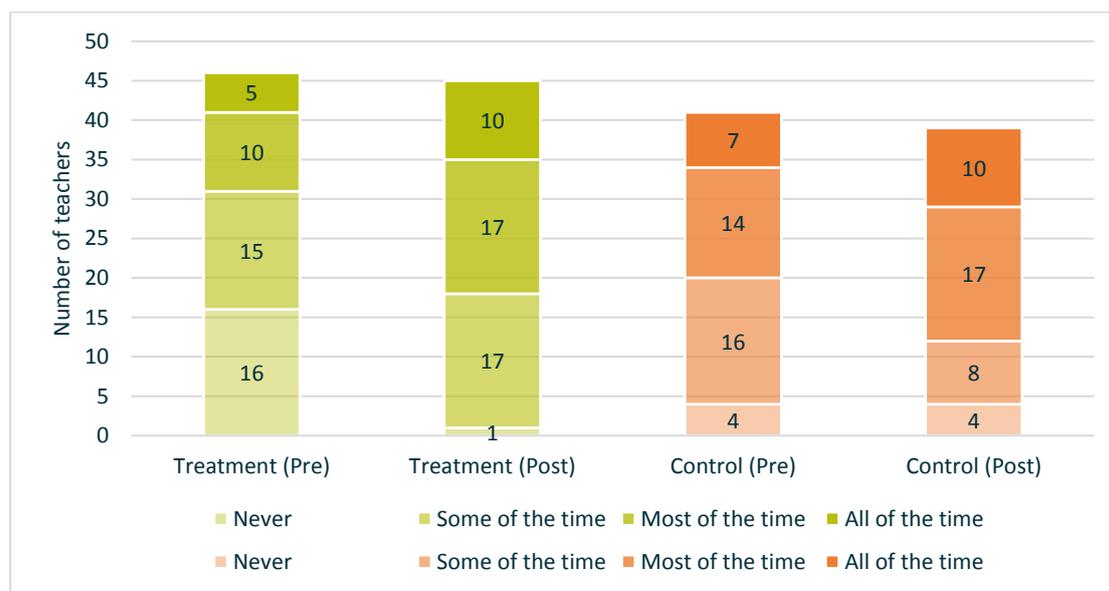
We then considered other potential explanatory variables (such as individual teacher and school characteristics) that may have had an impact on the observed differences between Treatment and Control Groups in terms of teachers’ use of technology in financial education delivery.

The General Linear Model (Appendix 7) reveals that use of technology in financial education teaching is influenced by whether teachers have previously taught financial education. Having no previous experience of financial education teaching is significant at the 5% level ($p=0.011$) and a positive coefficient of 0.696 which indicates that use of technology is impacted more by those teachers who had not previously taught financial education before the project. This could suggest that embedding technology at the start for teachers new to financial education enhances its use, rather than

requiring teachers to adapt previous teaching materials to incorporate use of technology.

The qualitative insights indicate that use of technology ranged from teaching materials such as PowerPoint presentations to interactive learning materials such as quizzes, interactive budgets, loan/interest rate calculators to show the impact of decisions dynamically on outcomes, and also using web technology, comparison sites and internet searches to enable research.

Figure 4: Have you used technology as part of financial education delivery?



Consideration of students' cultural, religious and socio-economic backgrounds in financial education lesson planning

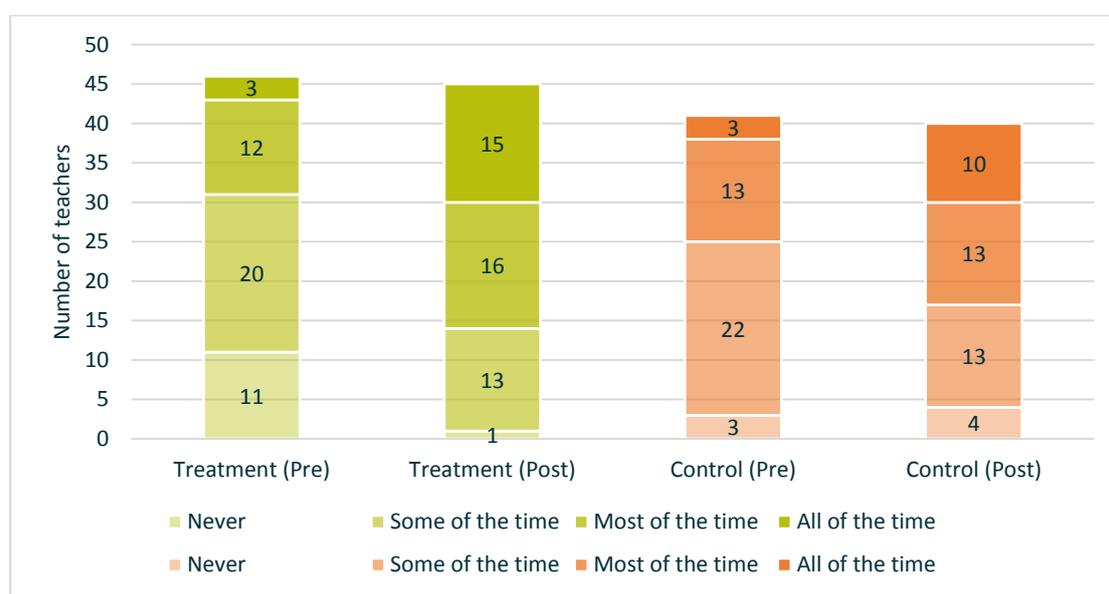
Overall, the training has had a differential impact on teachers' consideration of their students' religious and cultural characteristics in planning financial education lessons.

Appendix 6, Table 1 shows a positive change in terms of teachers' consideration of students' characteristics in financial education lesson planning in both Treatment and Control groups, however the difference is greater for the Treatment group. Both the Treatment and Control groups have statistically significant differences between the pre- and post-surveys, at the 1% level of significance ($p=.000$) for the Treatment group and at the 5% level ($p=.051$) for the Control group. The difference in differences between the Treatment and Control groups is statistically significant at the 5% level ($p=.048$).

Figure 5 shows that 15 teachers in the Treatment group took their students' cultural, religious and socio-economic background into account in financial education lesson planning either most or all of the time before the intervention and that this increased to 31 teachers after the intervention. The comparable numbers in the Control group are 16 at the pre-survey and 23 at the post-survey. In the Treatment group, 11 teachers said they never considered their students' cultural, religious and socio-economic background in financial education lesson planning at the start of the project, but by the end of the project this has reduced to only one teacher.

The General Linear Model (Appendix 7) reveals that the extent to which teachers considered their students' religious, cultural and socio-economic characteristics in financial education lesson planning is impacted by the training and the extent to which teachers were motivated to teach financial education and found it relevant and interesting. The Treatment group is significant at the 5% level ($p=0.039$) and has a positive coefficient, hence the training has had a positive impact on consideration of religious, cultural and socio-economic characteristics. Teacher motivation is significant at the 5% level ($p=0.014$), but has a negative coefficient (-0.340) which indicates that as teachers' motivation goes up, their consideration of students' religious, cultural and socio-economic characteristics in financial education lesson planning goes down. What this potentially suggests is that teacher interest and motivation alone may lead to some aspects being overlooked if not channelled through training.

Figure 5: To what extent have your students' cultural, religious and socio-economic background been considered in financial education lesson planning?



The effect of teacher motivation is likely to be influenced by the underlying drivers of the motivation. The teacher interviews provide evidence of the importance of teachers' interest and enthusiasm for personal finance as a driver for teaching financial education. The Qualitative Report (Appendix 5, Section 3) identifies four key drivers of motivation which include teachers' relevant previous experience or education:

'[finance]... its one area of the Business Studies curriculum which I've always enjoyed delivering. My degree is Accounting and Finance so I do have more of a finance background than the other areas'.

However, teachers were also driven by the general significance of the topic for young people:

'Any chances of pushing the agenda that finance is important to teach kids, I'm interested'

Teachers were also motivated in response to students' own requests to learn more about personal finance:

'The students always say to me, we learn about all these different things in school and college but we don't learn the important stuff in terms of their student loans and mortgages, financial products.'

Among the Treatment schools, there was definitely an indication that the training had impacted teacher motivation, making teachers more aware of the relevance of the topic and raising their interest and enthusiasm for it, as expressed by one teacher:

... I must confess I did think it would be quite dull if I'm brutally honest, and it wasn't...it taught me a bit of stuff as well but yeah, it was quite interesting that they [students] actually thought it was quite interesting.'

When I went on the course then it was really interesting so I was quite excited about doing it and seeing the difference.'

Financial education in the curriculum

Teachers were asked where in the curriculum they had delivered their financial education. Figure 6 shows that in both Treatment and Control schools the majority of financial education was delivered outside scheduled classes, most often in assembly time, tutor time, as well as some specific half-day or full-day sessions. The Treatment group delivered more financial education sessions in PSHE than in scheduled Maths or Business/Accounting/Economics classes. These differences, though, are not statistically significant. Recent research from Money Advice Service indicates a stronger link between PSHE (compared to other subjects) and financial capability of children⁸.

Figure 6: Where in the curriculum is financial education delivered?



There were no differences between the Treatment and Control groups in terms of the number of financial education sessions delivered. On average, both groups delivered 6 sessions, with some teachers in both groups delivering up to 10 sessions.

In terms of the number of sessions delivered across each of the five themes, one session on average was delivered on each theme in both the Treatment and Control groups. However, in both groups some of the teachers delivered more sessions on

⁸ Ann Griffiths and Shadi Ghezelayagh, Children and Young People and Financial Capability: Needs Analysis, Money Advice Service, April 2018.

Financial Planning and Budgeting (up to four sessions in some cases), and Choosing Financial Products (up to 10 sessions in the Control group). While in most cases, the length of the sessions was dictated by the timetabled periods, this was not consistent across teachers. Hence, the number of sessions is not necessarily an accurate measure of time spent on the relative topics. What this shows is that there does not appear to be major differences in the pattern of delivery between the Treatment and Control groups. Hence the quality rather than quantity of the delivery is likely to be a key factor.

Outcome: Teachers increase their confidence in delivering financial education

A key aspect of the project is to assess whether training teachers in financial education can develop teachers' confidence. Three questions were asked in both the pre- and post-surveys to assess teacher confidence in designing and delivering financial education and delivering financial education tailored to students' characteristics. A small set of questions were asked only in the post-survey regarding confidence in designing financial education strategies, confidence in using resources and digital technology and confidence in assessing and evaluating financial education outcomes.

Overall, the findings reveal that while the training has improved teacher confidence in the Treatment group in the areas of designing and delivering financial education and tailoring it to students' characteristics, it only had a differential impact compared to the Control group in confidence in delivering financial education.

Confidence in designing financial education lesson plans and confidence in tailoring financial education to students' characteristics and needs seem to be affected most by length of teaching experience and prior experience of having taught financial education. Additionally, the training has had a positive impact on teachers' confidence in assessing and evaluating the effectiveness of financial education teaching.

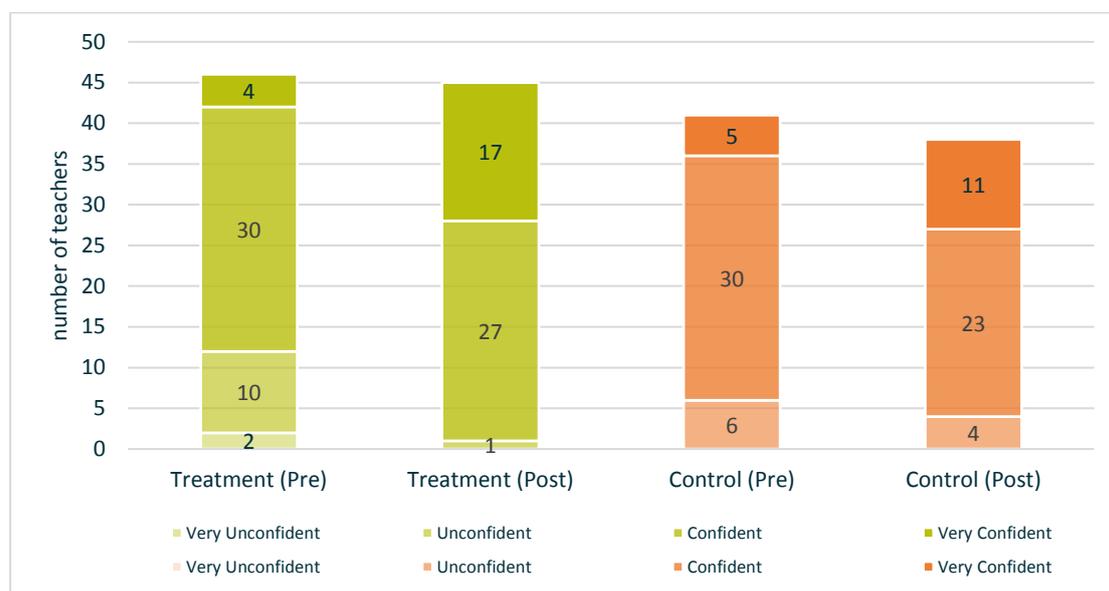
Appendix 6, Table 1 shows that the Treatment group has a statistically significant difference at the 1% level in all three aspects of confidence, whereas the Control group has a statistically significant difference in terms of confidence in designing financial education lesson plans at the 1% level ($p=.000$) and confidence in delivering financial education at the 5% level ($p=.011$). There is no statistically significant difference in terms of confidence in tailoring financial education to students' characteristics.

The difference in difference analysis shows a statistically significant difference between Treatment and Control groups at the 5% level in terms of confidence in delivering financial education ($p=.016$).

Figure 7 shows that 34 of the 46 teachers in the Treatment group felt either confident or completely confident delivering financial education before the training, but this had increased to 44 teachers after the training. The respective numbers in the Control group actually decreased from 35 to 34. The biggest change is in those teachers who felt completely confident, increasing from 4 to 17 teachers in the Treatment group - an additional 13 teachers who said they felt completely confident after the training - compared with an increase of only 6 teachers in the Control group. Moreover, 12 teachers in the Treatment group said they felt either unconfident or completely unconfident before the training, but only one teacher said they still felt unconfident after the training. Hence, all but one of the teachers who took part in the training felt either

confident or completely confident delivering financial education lessons after the training.⁹

Figure 7: Confidence delivering financial education



The General Linear Models (Appendix 7) reveal that confidence in designing financial education lesson plans is influenced by the interaction between previous experience in teaching financial education and confidence in teaching financial education, significant at the 5% level ($p=.03$). The coefficient for those who have not taught financial education before and confidence in financial education teaching is negative (-0.361) which indicates that those with a lack of experience in teaching financial education have lower confidence in designing financial education lesson plans. This suggests that confidence delivering financial education is a precursor to confidence designing financial education lesson plans.

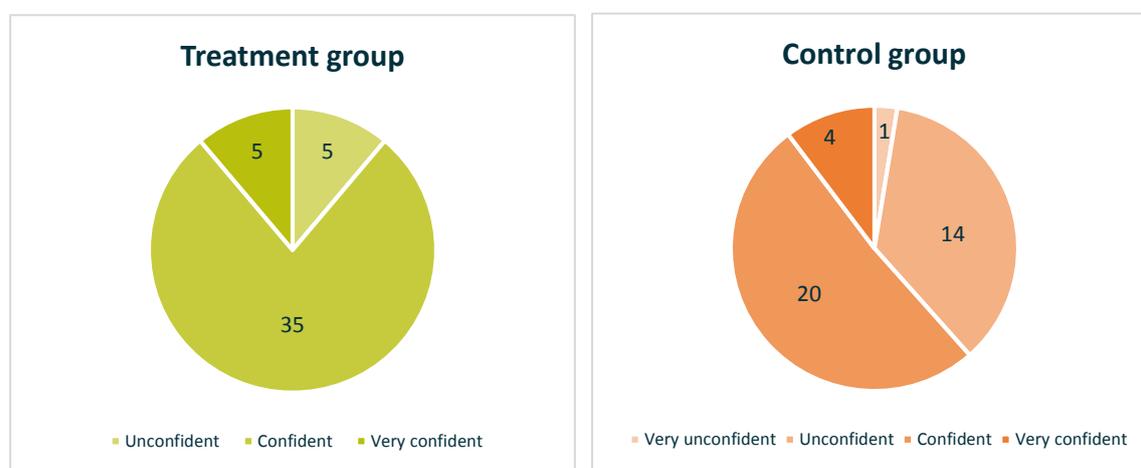
Confidence in delivering financial education is impacted by the training and also by the teacher's length of teaching experience. The training has a positive effect on confidence in delivery at the 5% level of significance ($p=.011$) and a positive coefficient of 0.354. Teaching experience has a positive effect on confidence delivering financial education at the 5% level ($p=.012$) and a positive coefficient of 0.372 for those teachers with 10 years or less teaching experience. The other factors did not have a statistically significant impact.

Confidence in delivering financial education tailored to students' characteristics and identified needs is accounted for by teachers' confidence in teaching financial education, significant at the 1% level ($p=.009$). The coefficient is positive (0.182) indicating that as confidence in teaching financial education increases in teachers, so too does confidence in tailoring financial education to students' characteristics and needs.

⁹ One teacher in the Treatment group and 3 teachers in the Control group did not answer this question in the post-survey, hence the total numbers are not comparable.

A small number of questions were asked in the post-survey only, hence it was not possible to measure the change before and after the intervention. However, using an independent samples t-test we explored the differences between Treatment and Control groups on the post-survey scores only. The only difference between the Treatment and Control groups, significant at the 5% level, is in relation to confidence in assessing and evaluating financial education ($p=.023$). Figure 8 shows that 40 out of 45¹⁰ teachers in the Treatment group felt either confident or very confident in assessing and evaluating the effectiveness of financial education teaching at the end of the project compared to 24 out of 39¹¹ teachers in the Control group. Only 5 teachers in the Treatment group felt unconfident at the end of the project compared to 15 in the Control group. Hence, the training has had an impact on improving teachers' confidence in assessing and evaluating the effectiveness of financial education.

Figure 8: Confidence in assessing and evaluating the effectiveness of financial education



Centres of Excellence

14 teachers from 4 of the 6 COE schools fully participated in the evaluation. This number is too small for detailed quantitative analysis, so we provide a more descriptive account from the survey data and the qualitative data based on interviews with two COE teachers.

The COE schools are part of a supported programme provided by Young Money that has been running for five years. The impact of the programme on schools is evident in this small sample, as highlighted by the following teacher:

'I think the main thing is that we have a lot of emphasis on financial education. It is a big part of the curriculum, particularly higher up the school and to have that stamp, that certification that we're a Centre of Excellence for it was a big thing'

The survey data provides evidence that financial education is more embedded in the curriculum compared to the Treatment and Control schools. 7 teachers reported that financial education was delivered in Maths or Business/Accounting/Economic classes,

¹⁰ One teacher did not answer the question
¹¹ Two teachers did not answer the question

3 reported delivering it in PSHE and 8 reported delivering it via other routes (such as off-timetable activities).

A more coordinated approach is evident in this teacher's explanation of how the teaching team organised the financial education lessons:

'We had meetings then to decide how we were going to narrow it down to have a specific focus in terms of what we would deliver per lesson. We then went and did some research, so we divided up the topics per member of staff. We did some research and then had another meeting presenting back what we'd found in terms of resources and put together two lessons.'

COE teachers also delivered more sessions on average compared to Treatment and Control schools. On average, COE teachers delivered two sessions on financial planning and budgeting and implications of work, compared to one session on average for the Treatment and Control Schools, and 1.5 sessions on average for seeking financial advice compared to one session on average for the Treatment and Control schools.

They also delivered to more students per member of staff. COE teachers on average delivered financial education to almost 60 students on average, compared to around 30-40 in the Treatment and Control schools.

Both teachers interviewed had enjoyed being part of the project and derived value from the training. The first teacher noted that it was: 'on the whole entertaining, engaging and useful to them [students]'. The second teacher noted: 'I've really enjoyed taking part in it and, obviously, it's given me loads more to build on.'

However, both teachers interviewed did feel that their previous experience as COE teachers/schools did help and they were noticeably more confident with financial education within these schools. Hence, it would appear that the training has provided a useful addition to the support and experience already derived from being in the COE programme, but has not contributed to significantly increasing the confidence of COE teachers in financial education teaching due to their more confident and experienced starting point.

3.2 Students

Sample characteristics

A total of 1,215 pre- and post-surveys matched at the individual student level were achieved across all students in the Treatment, Control and COE groups. Figure 9 provides a breakdown of the sample characteristics. The majority (58%) of students are in year 12, 31% are in year 13 and 10.5% are in either year 1 or 2 at a further education college. The gender distribution broadly represents the gender distribution in schools with 42% males and 58% females (Figure 9).

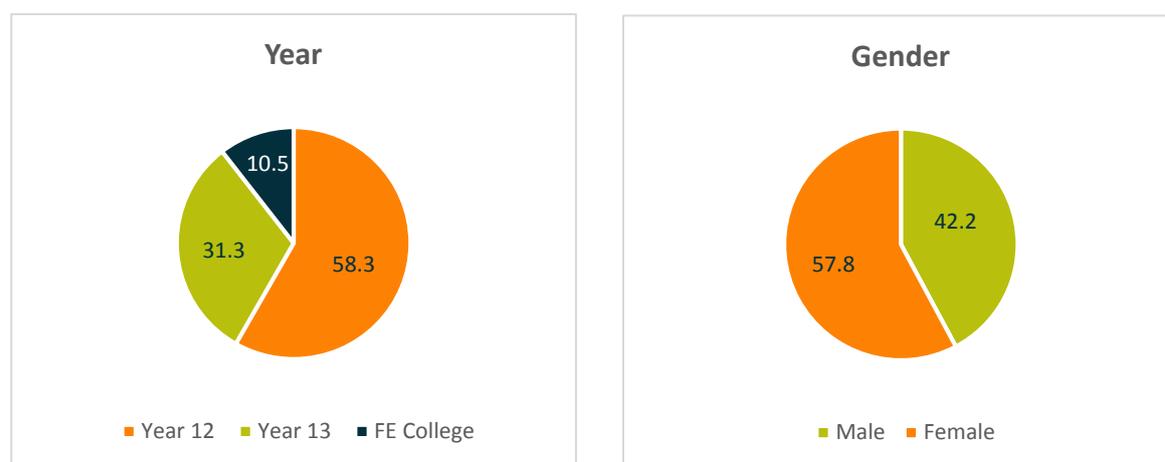
Treatment and Control groups

To mirror the teacher analysis, the following section focuses only on Treatment and Control schools in direct statistical comparisons. The analysis is based on 589 students across 46 Treatment schools and 495 students across 41 Control schools. Whilst all 7 COE schools participated in the project, we were only able to match pre- and post-surveys for 4 out of the 7 schools. Hence, the 131 students are from 4 schools. For this reason, we have not included the COE student data in direct statistical

comparisons with the Treatment and Control groups. A separate analysis is provided on COE schools at the end of this section.

We used the same analysis approach as for the teacher data, comprising within-groups changes between pre-and post-surveys, difference in difference between the groups and consideration of other factors, in addition to the intervention, on changes. For the students, this included student factors (i.e. gender), teacher factors (teacher confidence and motivation, length of teaching experience, financial education teaching experience), school factors (notably indicating social and economic disadvantage according to proportion of free school meals and schools in the 30% most deprived areas). The full details are included in Appendix 8.

Figure 9: Sample characteristics (percentages)



Outcome: Young people appreciate the importance of being financially capable

Based on the same 10-point scale used in the MAS Financial Capability Survey, 39.9% of the 1,084 post-16 students in the Treatment and Control groups at the pre-survey said they felt completely confident managing money (8-10 on the 10-point scale); but the majority (50.8%) felt fairly confident (4-7 score). Figure 10 compares how confident post-16 students are from the pre-survey data with the result to the same question for young adults and all adults from the 2016 Financial Capability Survey.

Using paired samples t-tests we explored whether any statistically significant changes could be observed within each of the groups in terms of confidence managing money between pre- and post-intervention. Table 7 (Appendix 7) shows in the first two columns that there was a statistically significant difference between the pre- and post-surveys for the Treatment group at the 1% level ($p=.000$), whereas there was no statistically significant difference observed for the Control group ($p=.209$). Using independent samples t-tests we explored the difference in difference between the Treatment and Control groups. The final column of Table 7 (Appendix 7) confirms a statistically significant difference between the Treatment and Control groups at the 5% level ($p=.018$).

Figure 11 shows that the proportion of students in the Treatment group that felt completely confident increased by 10 percentage points following the intervention to 48.6% of students that felt completely confident. This compares with 45% of young adults from the UK Financial Capability Survey 2016 that felt completely confident

managing money. The proportion of students in the Control group that felt completely confident managing money following the intervention remained at 42% (Figure 10).

Figure 10: How confident are you managing your money: post-16 students compared to young adults and all adults

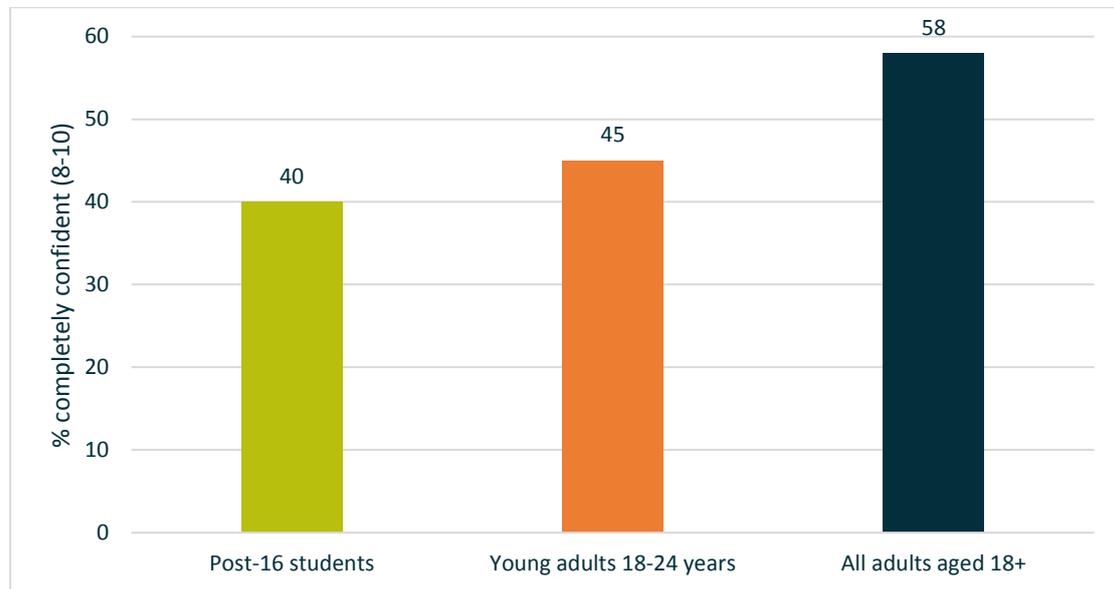
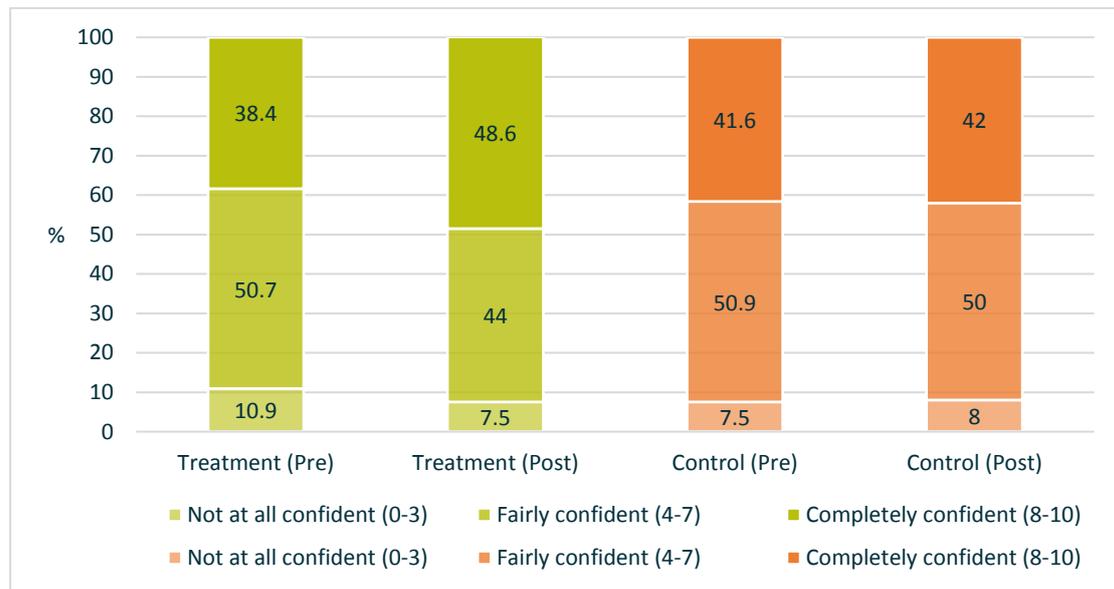


Figure 11: How confident are you managing your money?



Hence, post-16 students that received financial education from teachers who took part in the financial education training showed a marked increase in their confidence managing money compared to those students who were taught by teachers who had not received training in financial education.

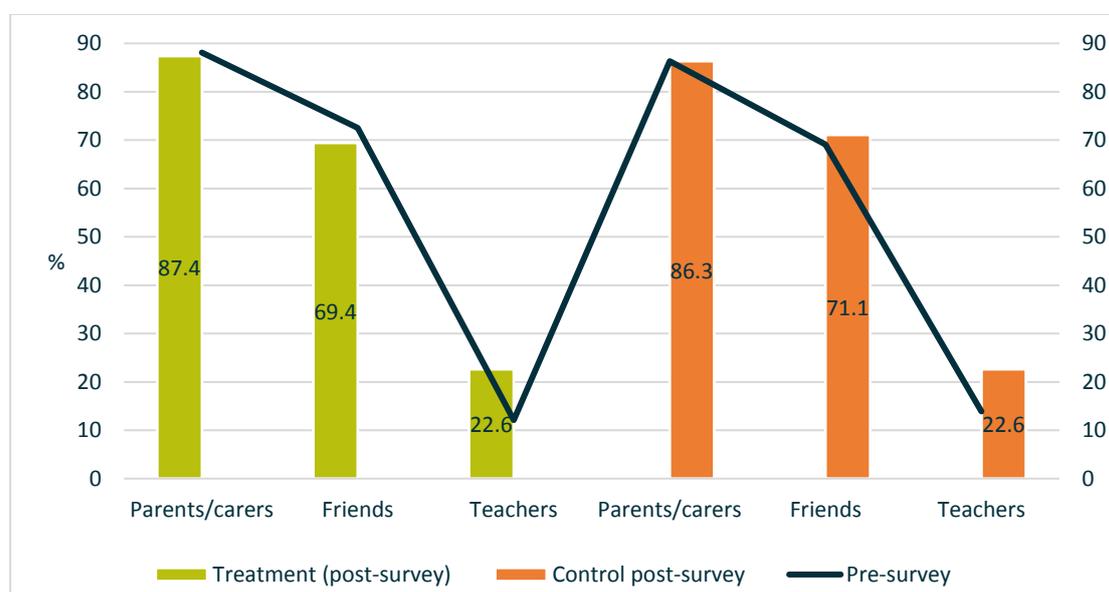
The General Linear Model (see Appendix 8, Table 1) confirms that overall confidence in managing money is affected by the training, and additionally by receipt of free school meals and motivation of teachers, with teacher length of experience having an impact through interaction with other factors.

The training has a positive effect on confidence at the 1% level of significance ($p=0.000$). Free school meals has a positive effect significant at the 5% level ($p=0.038$); as the percentage of free meals increases so does the confidence. However, teacher motivation has a negative effect, significant at the 1% level ($p=0.003$) which means, as teacher motivation increases, student confidence decreases. Teacher length of experience interacts at the 5% level of significance with teacher motivation ($p=0.017$), free school meals ($p=0.013$) and Treatment group ($p=0.011$). The impact is negative for both motivation and free school meals for teachers with experience of 10 years or less and positive for teachers in the Treatment group and less experienced teachers.

Outcome: Young people speak about personal finances to their peers and/or parents

On average, one in eight students say they talk to their parents or carers about money and one in seven talk to friends (see Figure 12). In general, the difference between pre- and post-surveys for Treatment and Control groups does not show too many noticeable differences with regard to whom students talk about money, with the exception of talking to teachers about money which has almost doubled from 12% in the Treatment group at the pre-survey and 13% in the Control group to 22% at the end of the project. This compares with recent research from Money Advice Service that finds only 7% of children aged 7-17 have talked to their teachers about money.¹²

Figure 12: Do you ever talk about money with any of the following people?



Outcome: Young people want to improve their level of financial capability

This section provides more detailed break-down of changes between pre- and post-surveys according to each of the five themes: fraud and identity theft, financial planning and budgeting, financial implications of work, seeking financial advice, and choosing financial products.

¹² The Financial Capability of Children and Young People: https://masassets.blob.core.windows.net/cms/files/000/000/566/original/CYP_Fin_Cap_handout_Nov_2016.pdf

Fraud and identity theft

Generally, students seem to have a good appreciation of the need to keep themselves safe online. At least 9 in 10 students at the pre-survey stage already knew, for example, it was their responsibility to keep their bank details, PIN and passwords safe, that criminals often pretend to be banks and other organisations to scam people, and that it isn't always safe to use an ATM. There was no statistically significant change at the post-survey in either Treatment or Control group.

The only significant difference observed was in relation to the statement 'It is my responsibility to keep my personal information safe online'. The difference between pre- and post-surveys is significant at the 1% level for the Treatment group, but not for the Control group, and the difference in difference between the Treatment and Control groups is statistically significant at the 1% level. The percentage change is relatively small, increasing by 2.5 percentage points to 97% in the Treatment group, but actually decreasing by 2.6 percentage points to 95.4% in the Control group. The overall high starting point suggests that this topic may already be covered via other routes, as explained by one teacher:

'we already do safety online, so I kind of built it into that as well and it would be financial things. It's also about other things to keep safe online so employers in the future might look at your social media pages...'

At the same time, the high starting point in the pre-survey could reflect an over-estimation of students' knowledge and understanding. One teacher noted students' surprise at what they thought they knew: *'they think they are IT savvy but actually they're not'* and *'I mean they were shocked. I showed them the video which we were shown in training and they were like 'no way''*. Even though the survey results do not show significant change over the project, students did derive value from this theme as indicated by a student in a Treatment school:

'the stuff on fraud and kind of keeping safe online and keeping your money safe, I felt that was really, really helpful so definitely keep that in because that's really important, especially nowadays you know'

This possibly explains the discrepancy between reported knowledge and behaviour from students. While over two-thirds of the students in both Treatment and Control groups agree that they never tell other people what their passwords are (an increase of approximately 5 percentage points on the pre-survey), at least 15% continue to disagree that this is the case.

However, the biggest changes observed are in relation to confidence. The analysis reveals that students who have been taught by teachers with financial education training feel more confident in terms of: keeping their phone/laptop/tablet safe when not in use, protecting themselves from fraud and identity theft, and knowing where victims of fraud and identity theft can seek help.

Appendix 6, Table 3 shows a statistically significant difference between the pre- and post-surveys for the Treatment group at the 1% level in relation to confidence in: keeping devices safe when not in use; protecting oneself from fraud and identity theft; recognising fraudulent communications and knowing where victims of fraud and identity theft can seek help. The Control group also shows a statistically significant change in the same aspects. The difference in difference between the Treatment and Control groups is significant at the 1% level in terms of confidence in knowing where

victims of fraud and identity theft can seek help ($p=.000$) and confidence protecting yourself from fraud and identity theft ($p=.001$), at the 5% level in terms of confidence recognising fraudulent emails and communications ($p=.029$) and confidence keeping your phone/laptop/mobile safe when not in use ($p=.031$). There was no statistically significant difference in difference between the Treatment and Control groups in terms of confidence in choosing a secure bank PIN and keeping it safe ($p=.574$) and confidence in using privacy setting on social media ($p=.316$).

Figure 13 shows that the proportion of students in the Treatment group that felt completely confident about protecting themselves from fraud and identity theft increased by 26.8 percentage points to 58.9% following the intervention. This compares with an increase of only 3.4 percentage points in the Control group.

Figure 13: How confident do you feel about protecting yourself from fraud and identify theft?

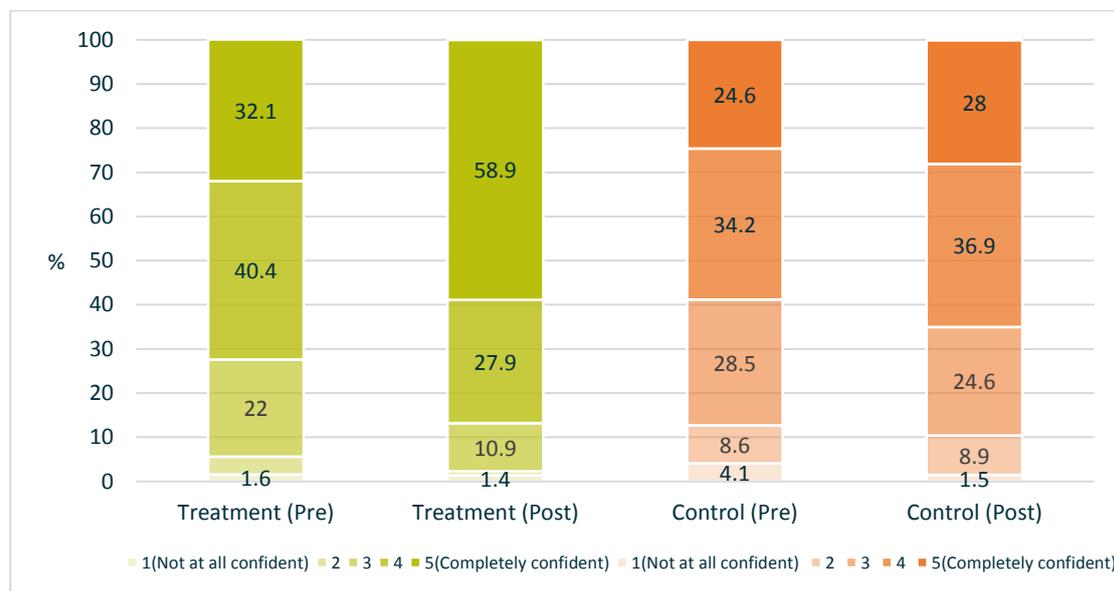
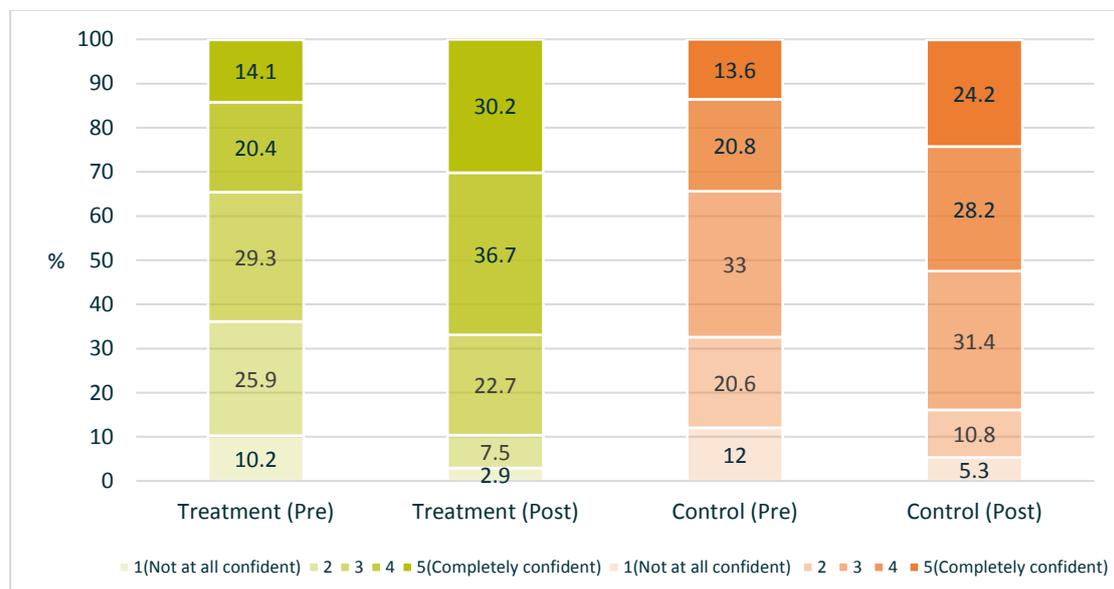


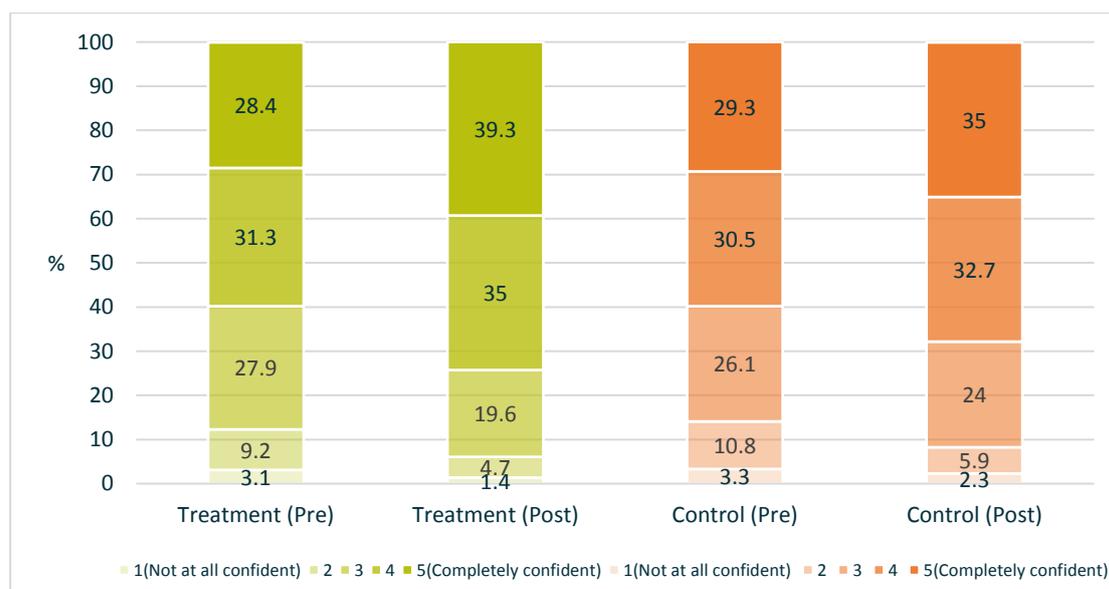
Figure 14: How confident do you feel about knowing where victims of fraud and identity theft can seek help?



The proportion of students in the Treatment group that felt completely confident about knowing where victims of fraud and identity theft can seek help increased by 16.1 percentage points to 30.2%, compared to an increase of 10.6 percentage points in the Control group (Figure 14).

The proportion of students in the Treatment group that felt completely confident recognising fraudulent emails and communications increased by 10.9 percentage points to 39.3%, compared with 5.7 percentage points in the Control group (Figure 15).

Figure 15: How confident do you feel about recognising fraudulent communications?



General Linear Models (Appendix 8, table 7) confirm the positive effect of the training on:

- confidence in keeping personal devices safe, significant at the 5% level ($p=0.032$)
- confidence in protecting oneself from fraud and identity theft (significant at the 1% level, $p=0.003$), although female students seem less confident, significant at the 5% level ($p=0.022$). In previous work, Harrison, Marchant and Ansell (2016) identified lower confidence among female young adults, although the explanation offered is that there may be an element of false confidence among male young adults.
- confidence in recognising fraudulent communications, significant at the 5% level ($p=0.029$).
- confidence in knowing where victims of fraud and identity theft can seek help, significant at the 1% level ($p=0.003$). There is also an interaction effect between Treatment and gender, significant at the 5% level ($p=0.038$), indicating that males in the Treatment group are less confident in this respect. This finding is consistent with other research that suggests young adult males are less likely to seek help (Harrison, Marchant and Ansell, 2016).

Overall, the findings for the theme of fraud and identity theft show that whilst some improvements in confidence occurred in both the Treatment and Control groups, the training has resulted in a higher improvement overall in terms of students' confidence in knowing where victims of fraud and identity theft can seek help, confidence in protecting oneself from fraud and identity theft, confidence in recognising fraudulent emails and communications and confidence keeping devices safe when not in use. Gender impacts on confidence protecting oneself from fraud and identity theft, with females less confident, and on knowing where to seek help, with males less confident in this respect. Other school or teacher factors do not have a noticeable impact.

Financial planning and budgeting

The proportions of students that felt it was very important to save money in case of emergencies, save money for the future in general, save money to achieve your goals and plan your budget to achieve saving increased in both Treatment and Control groups; the difference between the groups was not statistically significant. The proportion of students in the Treatment group that felt it was very important to save money to achieve your goals increased by 12.3 percentage points to 51.1%, compared to an increase of 9.9 percentage points to 46.9% in the Control group.

There was no statistically significant difference between the Treatment and Control groups in terms of attitudinal changes in relation to saving and budgeting, although there are some modest improvements within the groups (see Appendix 6, Table 4). We wouldn't expect to see major attitudinal shifts in such a short timeframe, although this is something to track over time.

Importantly, though, significant positive changes can be seen in relation to confidence in budgeting as a result of the intervention. The difference in difference between the Treatment and Control groups was statistically significant at the 5% level for confidence in knowing how to use a budget planning tool ($p=0.032$).

In the other aspects, the difference between the groups was not statistically significant; although the Treatment group shows a statistically significant difference at the 1% level between the pre- and post-surveys on all the areas covered under the theme of financial planning and budgeting, this is also mirrored in the Control group, except for confidence in keeping track of your money.

The proportion of students in the Treatment group that felt completely confident keeping track of their money increased by 9.3 percentage points to 46.6% following the intervention, compared to an increase of 2 percentage points in the Control group.

The proportion of students in the Treatment group that felt completely confident knowing how to use a budget planning tool increased by 11 percentage points to 23.6%, compared with an increase of 8.6 percentage points in the Control group (Figure 16).

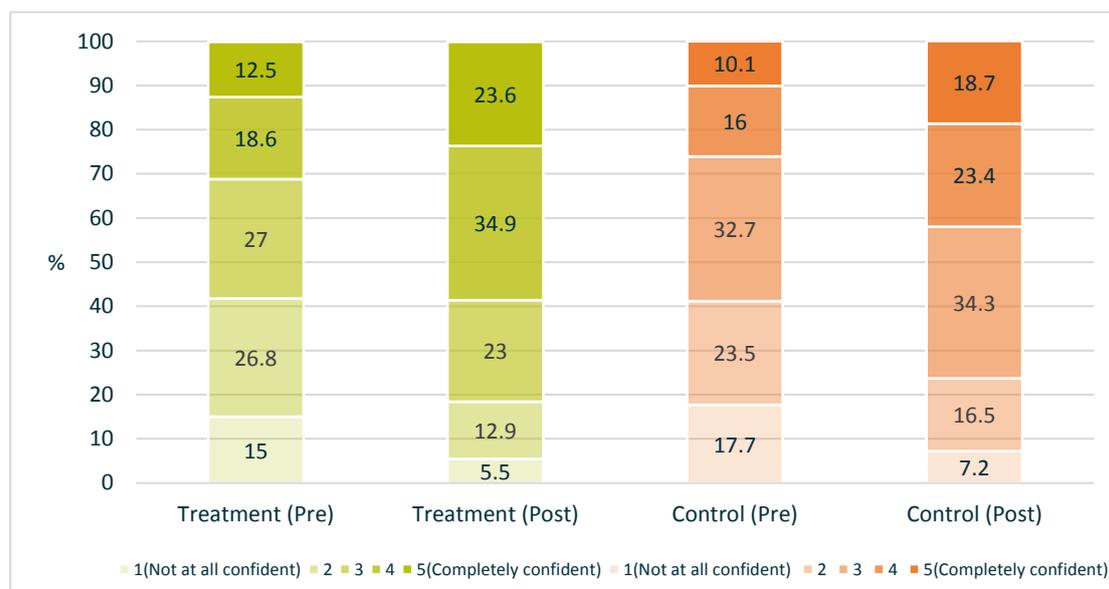
The General Linear Model confirms the positive impact of the training on confidence in knowing how to use a budget planning tool, significant at the 5% level ($p=0.032$) (Appendix 8, Table 3).

Overall, the findings for the theme of financial planning and budgeting show that whilst improvements in confidence occurred in both the Treatment and Control groups across almost all the aspects examined, the differential impact on the Treatment group can

be seen in relation to knowing how to use a budget planning tool and keeping track of money. This theme was popular with teachers, as illustrated in the following comment:

'Budgeting, we actually spent quite a bit of time on because there's so many different areas of their lives were they will need to budget'

Figure 16: How confident do you feel knowing how to use a budget planning tool?



Financial implications of work

The theme of financial implications of work, explored the extent to which students felt confident that they: understand what National Insurance and income tax is and why they have to pay it, that they know how to read a pay slip, and they appreciate the importance of education on their job prospects, as well as the importance of a job on the lifestyle they can lead.

For students in the Treatment group there was a statistically significant difference between pre- and post-surveys on all these aspects at the 1% level, with the exception of confidence understanding that your job has an impact on the lifestyle you can lead, which was significant at the 5% level ($p=.019$). The Control group also showed a statistically significant difference between pre- and post-surveys at the 1% level in terms of confidence understanding National Insurance and Tax and confidence reading a pay slip. Confidence understanding that your job has an impact on the lifestyle you can lead was significant at the 10% level ($p=.082$), and confidence knowing that education is key to getting a good job did not show a statistically significant difference within each group.

The difference in difference analysis, shows that the difference between the Treatment and Control groups was not statistically significant. Confidence in knowing that education is key to getting a good job is just outside the 5% confidence level of significance ($p=.077$).

In terms of confidence understanding what National Insurance is, the proportion of students in the Treatment group that felt completely confident that they knew what NI

was and why they had to pay it increased by 14.1 percentage points to 27.7% compared with an increase of 8.2% in the Control group (Figure 17).

Similarly, high proportions in both the Treatment and Control groups felt confident that they know how to read a payslip. In the Treatment group, the proportion of students that felt completely confident that they could read a payslip increased by 17.5 percentage points to 37.6%, compared to an increase of 11.3 percentage points in the Control group (Figure 18).

Figure 17: How confident do you feel you understand what National Insurance is and why you have to pay it?

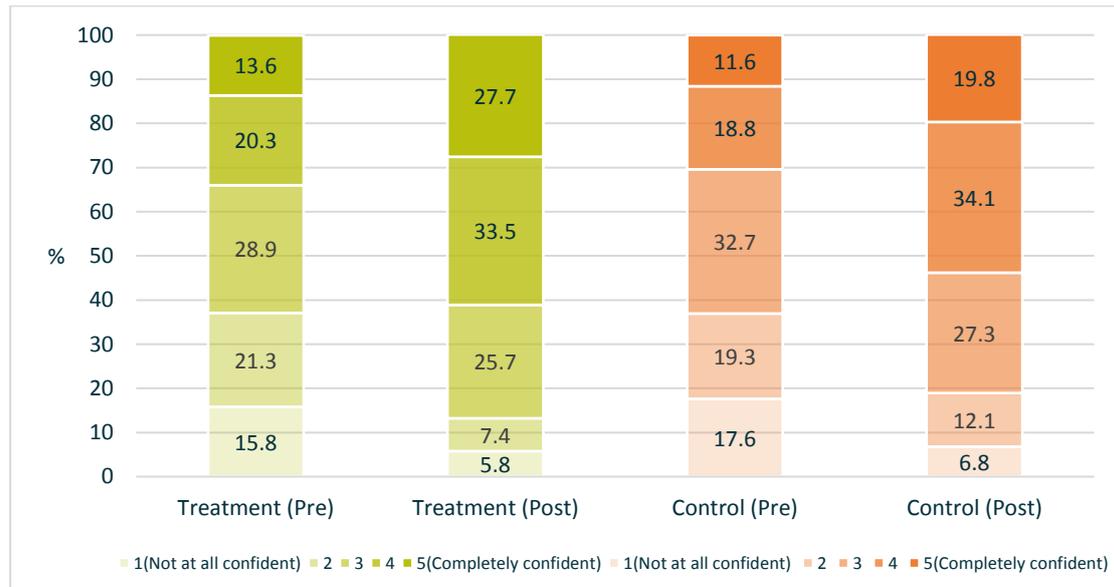
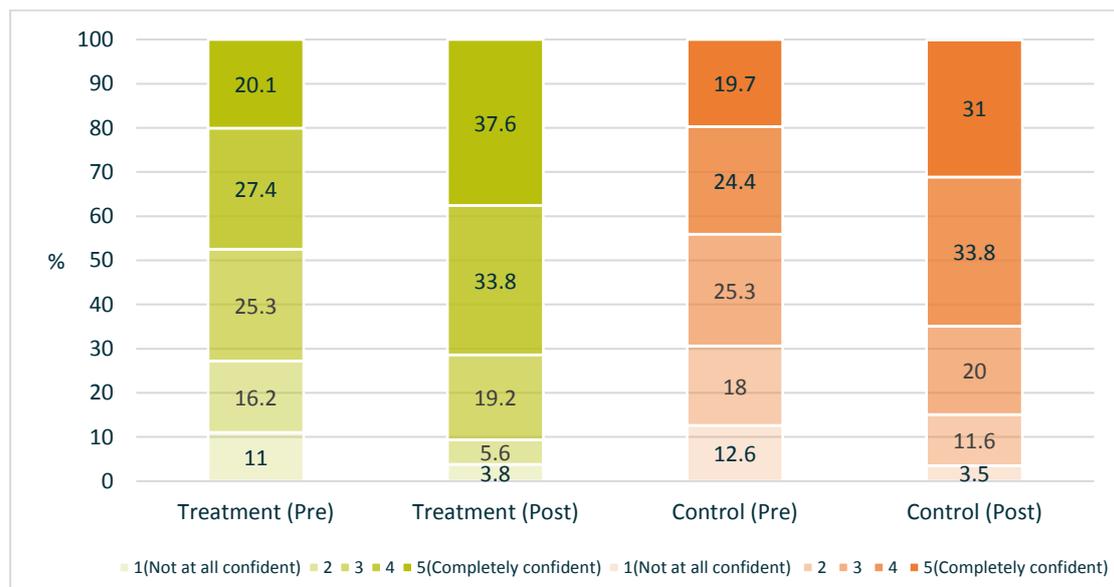


Figure 18: How confident do you feel that you know how to read a payslip and understand what it tells you?



The General Linear Model (Appendix 8, Table 4) shows that confidence in reading a payslip and understanding what it says is affected by the interaction between the training and receipt of free school meals at the 5% level of significance ($p=0.004$) with

a positive coefficient, but is negatively impacted in Control schools. Hence, confidence of students in reading and understanding payslips is significantly higher among schools that took part in the training and have higher proportions of free school meals. Confidence is lower among students in schools with higher proportions of free school meals whose teachers did not take part in the training.

Seeking Financial advice

Students were asked 'if you needed advice about money, who would you ask?' In both the Treatment and Control groups, parents are the most likely source of advice with 86.2% in the Treatment group and 84% in the Control group seeking advice from parents. However, by the end of the project students indicated slightly less reliance on parents for advice, compared to other sources of advice; there was a decline of 6.3 and 6.7 percentage points respectively. The biggest differences between the Treatment and Control groups in terms of sources of advice are in terms of asking teachers and seeking advice from Citizen Advice Bureau (CAB)/MAS. There was an increase of 7.1 percentage points in the Treatment group to 23.9% (against an increase of 1.6 percentage points in the Control group) in those who would seek advice from teachers. This is consistent with the earlier finding in relation to talking to teachers about money. There was an increase of 19 percentage points who would ask CAB/MAS to 35.5% in the Treatment group, against an increase of 7.1 percentage points in the Control group.

In terms of confidence in knowing where to go for advice, knowing what makes advice reliable and trustworthy, the differences between regulated and unregulated advice and paid for and free advice, and knowing where to get impartial advice, both the Treatment and Control groups show an improvement in the post-survey.

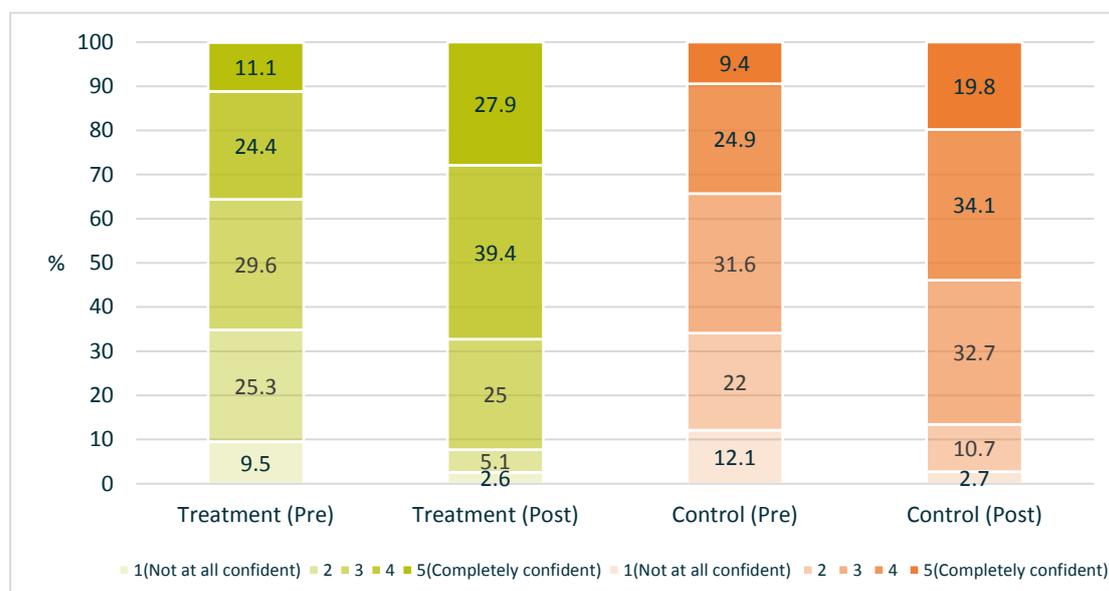
However, the training appears to have had a differential impact on the Treatment group at the 1% level of significance in terms of: confidence knowing what makes financial advice reliable or trustworthy ($p=.006$) and confidence knowing the advantages and disadvantages of paid for and free advice ($p=.006$), and at the 5% level in terms of confidence knowing the difference between regulated and unregulated advice ($p=.010$), confidence knowing where to go for financial advice ($p=.016$), and confidence knowing what sources of advice are available ($p=.041$).

The proportion of students in the Treatment group that felt completely confident they know what makes financial advice reliable or trustworthy increased by 17.3 percentage points to 27.9%, compared to an increase of 12.1 percentage points in the Control group.

Figure 19 shows that the proportion of students in the Treatment group that felt completely confident they know what sources of advice are available increased by 15.9 percentage points to 27.9%, compared to an increase of 10.4% in the Control group.

Figure 20 shows that the proportion of students in the Treatment group that felt completely confident they know the difference between regulated and unregulated advice increased by 14.2 percentage points to 21.1%, twice as much as the increase of 7.2 percentage points in the Control group. Moreover, the proportion of students in the Treatment group that did not feel at all confident that they knew the difference between regulated and regulated advice decreased by 22.8 percentage points.

Figure 19: How confident do you feel that you know what sources of advice are available?



The General Linear Model (Appendix 7, Table 4) shows that confidence in knowing where to go for financial advice is affected by gender, both uniquely and in interaction with the training. Males are less confident at the 1% level of significance ($p=0.021$). The interaction between gender and Treatment group has a negative effect for males in the Treatment group, at the 5% level of significance ($p=0.021$). The confidence of male students appears to reduce following financial education in the Treatment schools, but not Control schools. This is likely to be a re-calibration of over-confidence of males prior to the intervention, based on more accurate information provided by teachers who have been trained.

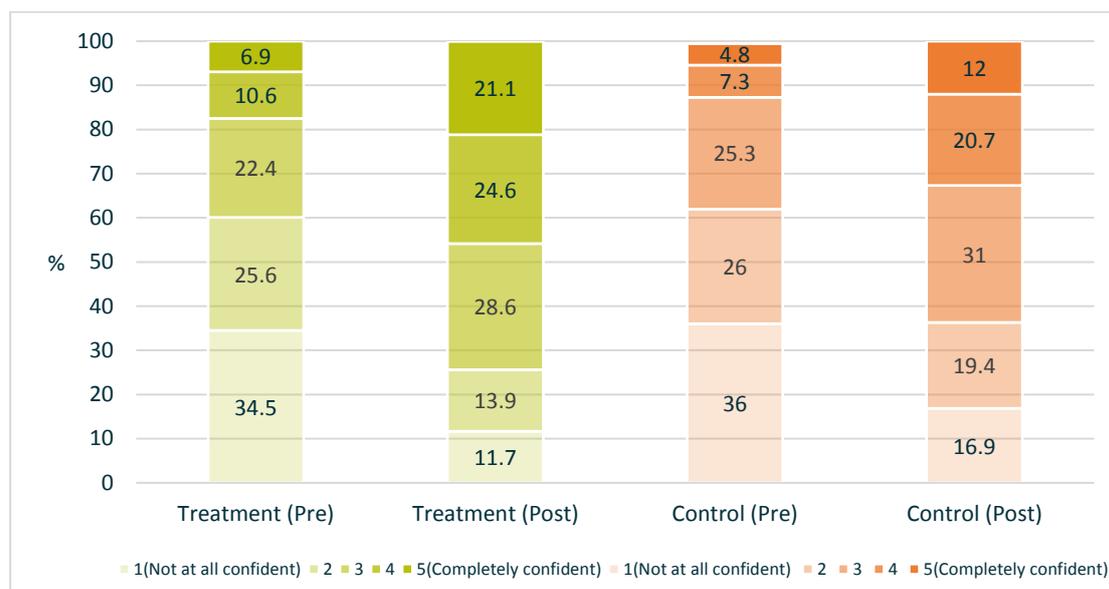
In terms of confidence in knowing what sources of advice are available, the Treatment has a positive effect on confidence (at 5% level of significance, $p=0.003$), and length of service and gender both have a negative effect at 5% ($p=0.023$) and 1% ($p=0.000$) levels of significance respectively. There are interaction effects between length of service and whether teachers have previously taught financial education, and length of service and free school meals, and IMD and free school meals, at 1% ($p=0.002$), 5% ($p=0.012$) and 5% ($p=0.013$) levels of significance respectively.

The impact on students' confidence in knowing what sources of advice are available is:

- higher for students taught by teachers with less than 10 years' experience who have not taught financial education before;
- lower for students taught by teachers with less than 10 years' experience in schools with higher proportions of free school meals, and,
- higher in those schools not in the 30% most deprived areas (according to IMD) and with lower proportions of free school meals.

The General Linear Model confirms that confidence in knowing what makes advice reliable or trustworthy is positively affected by the training; the Treatment group is significant at the 1% level of significance ($p=0.006$).

Figure 20: How confident do you feel that you know the difference between regulated and unregulated advice?



For confidence in differentiating between regulated and unregulated financial advice, the General Linear Model confirms that students in the Treatment group have more confidence; Treatment group is significant at the 5% level ($p=0.010$) of significance. In terms of confidence in knowing where to get impartial advice, students in the Treatment group are more confident (at 1% level of significance, $p=0.002$). IMD (at 5% level of significance, $p=0.046$) has a positive effect on confidence and free school meals has a negative effect (at 1% level of significance, $p=0.003$). Thus, schools not in the 30% most deprived areas and those with lower proportions of free school meals have greater confidence. However, this is counter-balanced by the interaction between Treatment group and IMD; the negative coefficient for schools in IMD 4-10 in the Treatment group, suggests that the training potentially has the effect of re-calibrating over-confidence.

Confidence in knowing the advantages and disadvantages of paid and unpaid advice is increased by the training at the 1% level of significance ($p=0.004$) but lowered by increasing free meals and gender at 5% (0.014) and 1% (0.001) level of significance respectively. This means as free school meals increase then confidence decreases and that female students are less confidence than their male counterparts. The interaction between length of service and motivation has a negative effect for those teachers with less than 10 years' experience at the 5% level of significance ($p=0.028$).

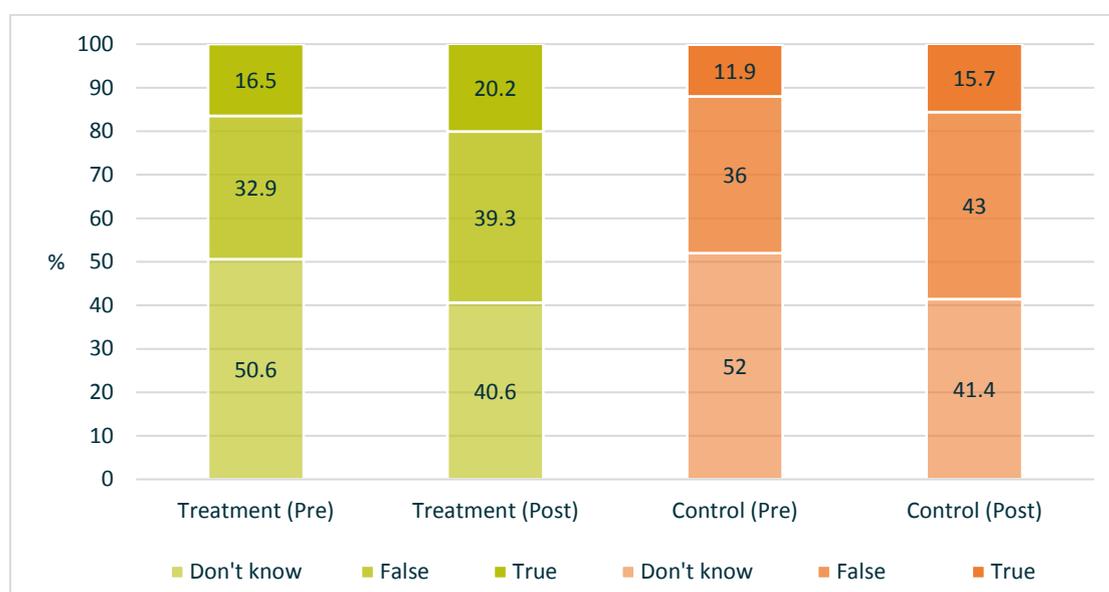
Overall, this is one area where we see some subtle differences in confidence according to disadvantage and gender, in combination with teachers' experience. The findings seem to suggest that financial education from trained teachers has the potential to re-calibrate potential over-confidence among male students and students from more socially advantaged areas.

Choosing financial products

The final theme, choosing financial products, explored students' confidence in understanding specific financial products, being able to compare options for products, and using information and advice to make choices and decisions.

Over three-quarters in both the Treatment (78.4%) and the Control (80%) groups appreciate that some types of borrowing are more expensive than others at the pre-survey. Yet, only one third of students in both the Treatment and Control groups correctly knew at the pre-survey that payday loans do not have lower interest rates than credit cards; the rest either incorrectly thought that they do have lower interest rates, or didn't know. Figure 21 shows that there has been a similar increase of approximately 7 percentage points in those that correctly answered the question in both groups, the proportion that are still unsure what the correct answer is at the end of the project remains high at 40% in both the Treatment and Control groups, despite a decrease of 10 percentage points in the Treatment group.

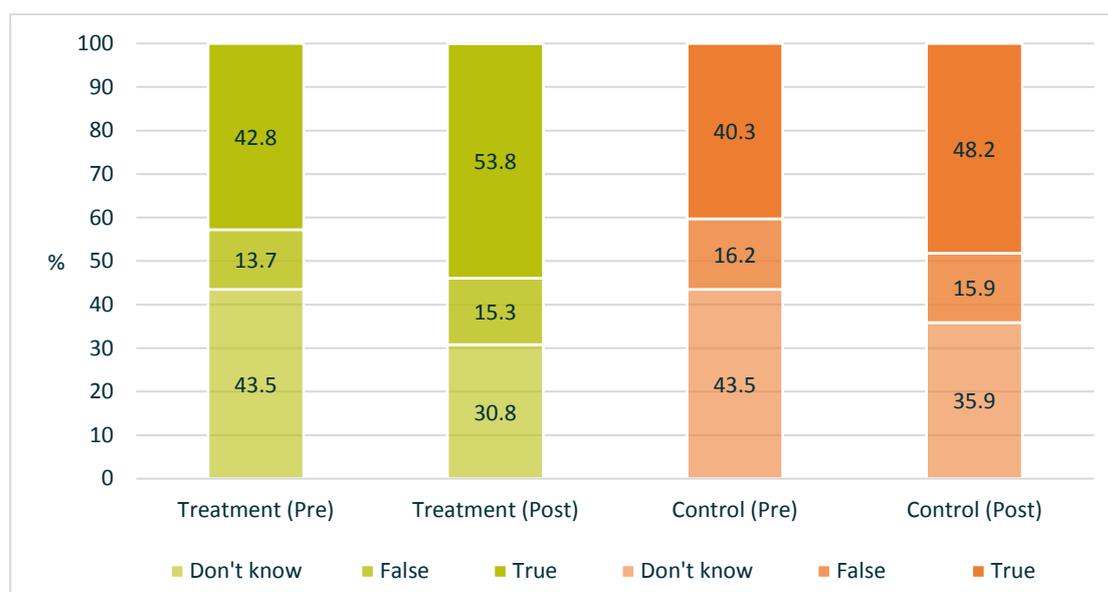
Figure 21: Payday loans usually have lower interest rates than credit cards



The proportion of students in the Treatment group that correctly knew that student loans are a cheaper way to borrow money compared to other loans increased by 11 percentage points to 53.8% in the Treatment group, compared to an increase of 7.9 percentage points in the Control group. However, 30.8% in the Treatment group and 35.9% in the Control group remained unsure about this at the end of the project (Figure 22).

Appendix 6, Table 7 shows a statistically significant difference in both the Treatment and Control groups between the pre- and post-surveys in students' confidence in being able to explain a variety of financial products. The difference in difference analysis shows a statistically significant difference between the Treatment and Control groups at the 1% level in relation to confidence explaining student loans ($p=.003$), and at the 5% level in terms of confidence explaining credit cards ($p=.038$), overdrafts ($p=.050$) and insurance ($p=.050$). There was no difference between the groups in terms of students' confidence in explaining a bank loan, a mortgage or a savings account.

Figure 22: Student loans are a cheaper way to borrow compared to other loans



The proportion of students in the Treatment group that felt confident in explaining a student loan increased by 17.7 percentage points to 38.4% (Figure 23) compared to 13.6 percentage points in the Control group. In terms of confidence explaining a credit card, the Treatment group increased by 18.6 percentage points to 42.9% compared to 16.8 percentage points in the Control group (Figure 24).

The General Linear Model confirms the effect of the training on confidence in explaining credit cards (significant at the 5% level, $p=0.038$) and for student loans (at the 1% level of significance). Confidence in explaining savings accounts arises from an interaction between IMD and teacher motivation; for schools in IMD 4-10 the effect of teacher motivation is negative at the 1% level of significance ($p=0.000$), meaning that teacher’s motivation has a negative impact on confidence explaining savings accounts for students in IMD 4-10 areas. This again highlights the potentially negative impact of motivation without training (as in the case of the Control Group).

Regarding making financial choices and decisions, there was a statistically significant difference observed in both the Treatment and Control groups in terms of confidence in choosing a financial product, confidence in using advice to choose a financial product, confidence in ensuring students’ get the best deal, and confidence comparing the options available. The difference in difference analysis shows a statistically significant difference between the Treatment and Control groups at the 1% level in terms of confidence in choosing a financial product ($p=.001$), confidence in using advice to choose a financial product ($p=.009$) and confidence ensuring you get the best product for your needs ($p=.009$). At the 5% level a statistically significant difference in difference was observed in terms of confidence comparing the options available ($p=.021$).

Figure 23: How confident do you feel explaining a student loan to a friend?

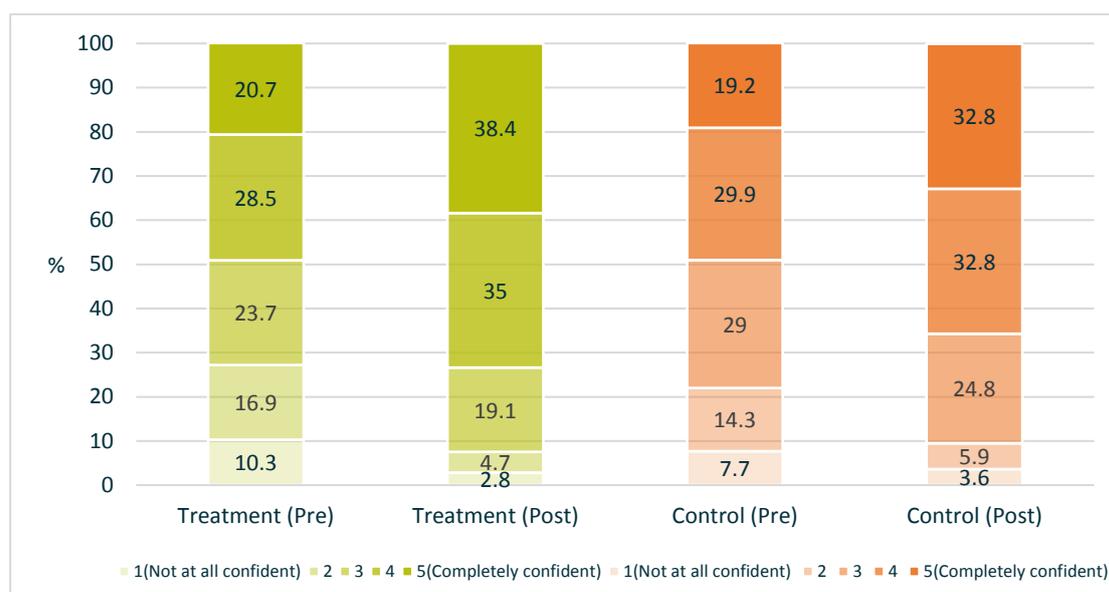
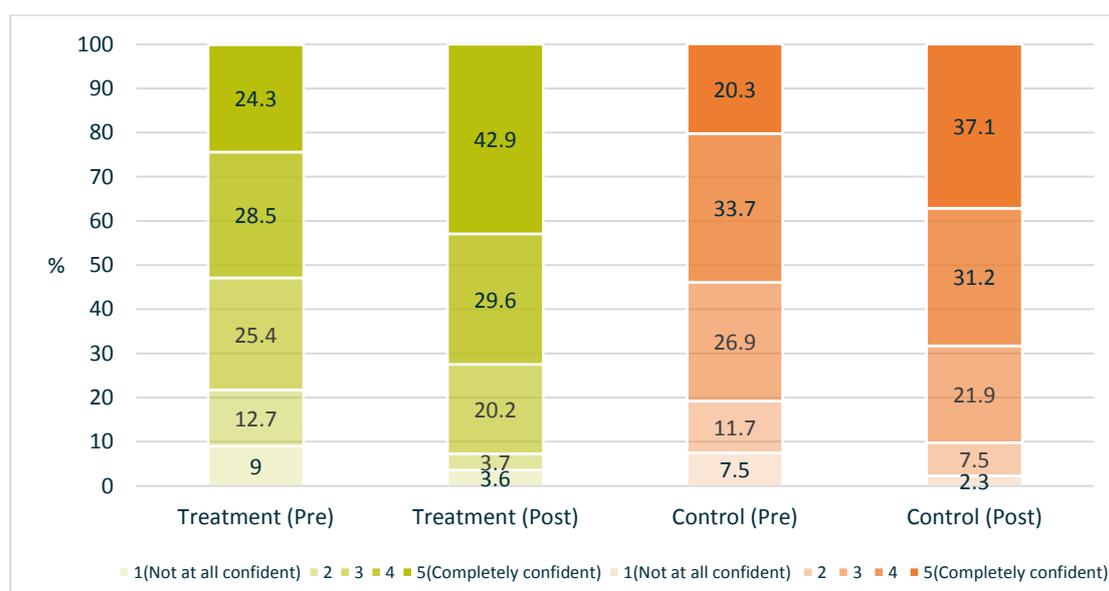


Figure 24: How confident do you feel explaining a credit card to a friend?



Overall, the training has had a differential effect on increasing students' confidence in being able to understand and explain a range of financial products. At the same time, the Control group also improved in many respects in this theme. The qualitative report in Appendix 5 indicates that the Control group tended to focus more on product features rather than considering the wider aspects of products in everyday life.

Impact of financial education on behaviour

At the end of the post-survey students were asked to reflect on any changes they had made as a result of the financial education. The options given included: changing a pin or password to make them more secure, changing the personal information shared on social media, using a budgeting app, starting to save or saving more, using a comparison website, seeking a quote for insurance and seeking advice on student loans. In all of these, a higher proportion of students in the Treatment group had made

changes compared to the Control group, although the differences between the groups were only statistically significant in relation to three specific behaviours.

Appendix 6, Table 8 shows a statistically significant difference between the Treatment and Control groups at the 1% level in terms of changing the personal information shared on social media ($p=0.008$), and at the 5% level in terms of starting to save or saving more ($p=0.018$), and seeking advice on student loans ($p=0.036$). Figure 25 shows that 27.7% of students in the Treatment group said they had made changes to the personal information they share on social media, 50.4% said they had started to save or were saving more, and almost a quarter (22.2%) said they had sought advice on student loans. One quarter of students in the Treatment group also said they had changed a password or a PIN to make it more secure, compared with 20.8% in the Control group. This was just outside the 5% significance level ($p=0.052$).

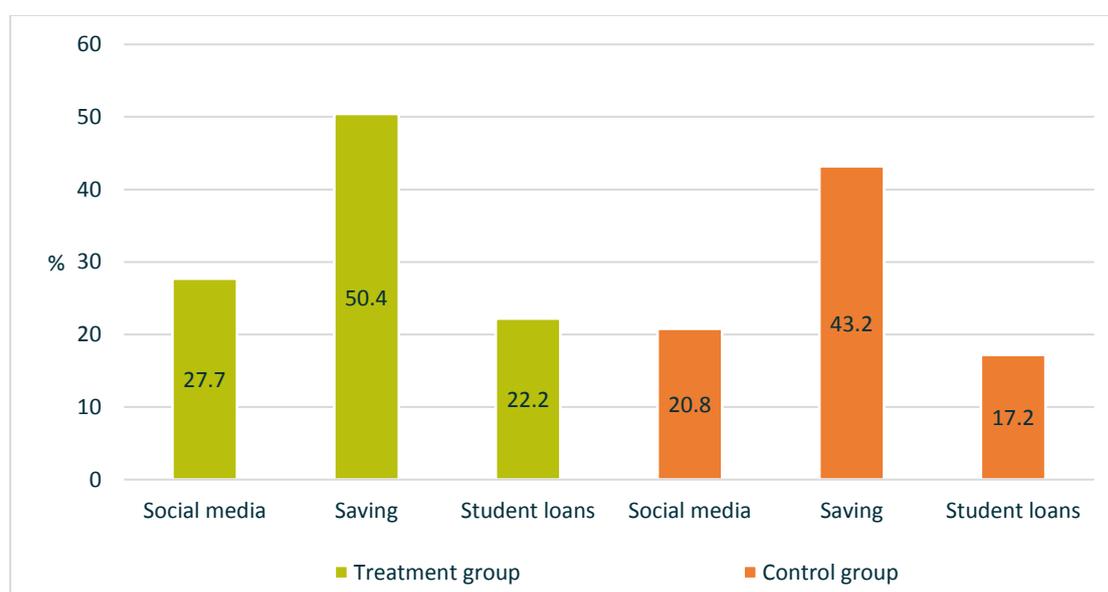
Students were also asked whether there were any other changes they had made or intended to make to the way they managed their money. Students in both the Treatment and Control groups said they intended to budget better, spend less and save more. However, the comments from the following students in the Treatment group suggest perhaps a clearer sense of how such goals might be achieved through using budgeting tools, actively setting goals and targets, using savings 'rules of thumb' and shopping around for bank accounts:

- 'Using a budgeting tool'
- 'Separate my money, to ensure I'm saving a decent amount regularly'
- 'Save approx. 30% of my income every pay day'
- 'Look around for more bank accounts'
- 'I have started to look at my long term goals (5 and 10 yrs. time)'

This compares with a more general sense of saving from students in the Control group:

- 'I am going to save more efficiently'
- 'Save more money'
- 'Saving a bit more'

Figure 25: Changes in behaviour resulting from financial education



Centres of Excellence

There were 131 students representing just 10% of the overall sample of 1,215 students.

Fraud and Identity theft

Students in the COE group displayed higher confidence at the pre-survey on all aspects. For example, 38.9% felt completely confident that they knew how to recognise fraudulent emails, which is approximately the same as the Treatment group post-intervention. Furthermore, 58.7% felt completely confident at start that knew how to choose a secure PIN and password and 60% respectively felt completely confident about keeping devices safe and using privacy settings on social media. Not surprisingly, the difference between pre- and post-surveys is not statistically significant, with the exception of confidence knowing where victims of fraud and identity theft can go to get help, which is significant at the 1% level ($p=0.011$); 21.4% were completely confident at the start, which is higher than the Treatment group post-intervention, and this increased to 29.5%.

Financial planning and budgeting

43.9% of students in the COE group felt completely confident keeping track of their money at the start of the project which is only slightly lower than the result achieved in the Treatment group following the intervention (46.6%). Not surprisingly, few differences were observed in the COE group between pre- and post-surveys in relation to financial planning and budgeting, with the exception of confidence knowing how to use a budget planning tool, which is significant at the 1% level ($p=0.003$), and confidence saving to meet a long-term goal, significant at the 5% level ($p=0.032$). Interestingly, the impact of the intervention on Treatment schools was mainly in budgeting. The improvement in confidence in saving observed in the COE schools is possibly a further confirmation of their more advanced starting point (assuming that competence in saving requires competence in budgeting).

Financial implications of work

The starting and ending points for the COE group in terms of confidence around financial implications of work were comparable with those of the Treatment group and not noticeably different. However, there appears to be some impact on confidence understanding what National Insurance is and why you have to pay it (significant at the 1% level, $p=0.000$), confidence knowing what income tax is and why you have to pay it (significant at the 1% level, $p=0.013$), and confidence in how to read a pay slip and understand what it tells you (significant at the 1% level, $p=0.000$).

Seeking financial advice

The results in relation to seeking financial advice are very similar to those achieved for the Treatment group. In this theme, the starting point of the COE schools is no different to the starting point for the Treatment schools. However, there does appear to be an impact from the intervention on confidence in knowing what sources of advice are available, confidence knowing what makes advice reliable and trustworthy, and confidence knowing the difference between regulated and unregulated advice, all of which are statistically significant at the 1% level ($p=0.000$). Also significant at the 1% level are: confidence in knowing where to get impartial advice ($p=0.011$) and

confidence knowing the difference between paid for and unpaid financial advice ($p=0.013$).

Choosing financial products

In terms of confidence in being able to explain a range of financial products, the findings are comparable to the Treatment group. The starting point is not different from the starting point in the Treatment group, suggesting that the confidence around financial products is not any higher for the COE schools. However, there is a statistically significant difference between pre- and post-surveys at the 1% level of significance in terms of confidence in explaining payday loans ($p=0.001$), mortgages ($p=0.007$), overdrafts ($p=0.000$) and insurance ($p=0.019$) and at the 5% level in explaining student loans ($p=0.049$) and savings ($p=0.056$).

Overall, the training has had limited impact on the themes of fraud and identity theft and financial planning and budgeting as these themes seem to have been covered well previously and students were more confident in these aspects at the start of the project than students in the Treatment group were by the end of it. However, the training does seem to have exerted an impact on seeking financial advice and choosing financial products, themes that are generally less well covered in financial education and, according to the trainers, themes that teachers found more challenging in the training.

4. Limitations

Several limitations affected the project. The main limitation can be attributed to the short timeframe. Schools effectively had one term in which to deliver their financial education. This inhibited some schools from participating, led to drop-outs throughout the process, and a reduction in the data as a result.

Ideally schools require a minimum 9-month lead in time before a project commences. This provides the time needed to secure buy-in from the Senior Leadership Team to the educators who will be directly benefitting. It also allows sufficient time, if needed, to promote the project to any students that will be involved. Schools will typically establish their priorities and time-tabling from the spring half-term for the following academic year.

In addition, for programmes that run over a period of time, schools tend to preference those that either run across complete terms, or the entire academic year. This compliments their scheduling and operates within a structure that both educators and students are comfortable with.

The short timeframe has also impacted on the follow-up time. The time between the financial education delivery and the post-survey was very short for some schools that delivered their financial education at the end of the term. Hence, the opportunity for students to put the learning into practice and make changes to behaviour was very limited. Ideally, there should be a gap of at least one month following the intervention to allow for reflection and action. Whilst we did observe many significant improvements in financial capability, we did not observe major changes in attitudes and only some changes in behavior, which may be due to the short timeframe. This points to the need for further follow-up work to track the longer-term effect of financial education.

The project suffered from drop-outs, consistent with drop-out rates generally in randomised controlled trials. An unknown factor, though, is the extent to which the drop-outs occur randomly or not. We lost more teachers from the Control group than the Treatment group. This may be because teachers had invested more in the project in the Treatment group, having taken part in the training. Teachers in the Control group may have dropped out because they felt less confident or more exposed going into the project without any training. We followed up with all teachers that dropped out and the main reason given was time pressure or staffing changes.

We used online surveys for both teachers and students as an efficient means of gathering data. In the main the surveys worked very successfully, but we encountered some issues with the student surveys. There were a large number of duplicate surveys (where students had started a survey, not completed it, and started a new survey), which artificially increased the response rate. Completions worked better when teachers gave students time to complete the survey in class. To ensure pre- and post-surveys could be matched anonymously, students were asked to generate a unique code to avoid giving personal information. This generally worked very well, but some students did not complete this sufficiently and resulted in those surveys being excluded.

We did not have control over when financial education was delivered or where it was delivered in the curriculum, which may have had an effect on the evaluation. Also, the time of year may have also had an impact. Many of the schools were completing the post-survey immediately before or after Christmas. This may have had an impact on perceptions of money, particularly spending and budgeting.

5. Implications and recommendations for policy and practice

Key learning from the project

- Training teachers to teach financial education clearly has an impact on improving both teacher outcomes and student outcomes. Teachers feel more confident in developing and delivering their financial education and students that have been taught by teachers who have been trained in financial education are significantly more confident in managing money and more confident in relation to a range of financial capability outcomes under the five themes explored. The effect of the training has had the impact of increasing post-16 students' confidence in managing money to a level comparable with the 18-24 year old young adult demographic (based on the UK Financial Capability Survey). Increasing the level of financial capability of school leavers in this way ensures they are better equipped to deal with the key transitions and financial implications they are about to encounter as young adults.
- The greatest impact in terms of the training seems to be in teachers with less than 10 years' experience. This does suggest that for training to have the optimum impact, it needs to be provided to teachers who are still at a relatively early stage of their career.
- At the same time, a number of positive changes were also demonstrated by the Control group. The Control group was given access to free resources to

help develop and deliver financial education. There is evidence that teachers in the Control group made as much use of these resources as teachers in the Treatment group. Having access to resources on their own does seem to deliver some benefit in targeted areas in terms of increasing both teacher and student confidence.

- There is clearly benefit from delivering training and resources in a structured, themed, approach. Teachers are busy and appreciated the access to resources and teaching materials that could be adapted, but also wanted more provided in terms of lesson plans, learning outcomes etc. Teachers welcomed the training and enjoyed it. Those teachers that had taken part in the training were able to make more effective use of the resources and reported that they developed lesson plans more efficiently. Any training delivered to teachers needs to be sensitive to the school planning cycle.
- The learning from the project is being considered as part of the ongoing development of Young Money's CPD for teachers. In particular, reflection on the nature of the resources and appropriateness of them for the post-16 age group.

Key learning for the wider community

- To support appropriate financial education in schools, teachers need to have access to good quality teaching resources that are appropriate to the age and characteristics of their students and appropriate to specific themes within financial education. However, access to resources alone, without training, will only take teachers and students part of the way along the journey towards greater financial capability. Teachers also need to be trained in how to use the materials.
- There are significant benefits to considering the wider roll-out of teacher training in financial education according to a set, consistent curriculum. There are various ways in which this could be considered, as ongoing CPD for qualified teachers, or embedded in Initial Teacher Education programmes for newly qualified teachers.
- Access to ongoing support and development, such as that provided through the Centres of Excellence programme, further enhances both teacher and student outcomes in financial education. Access to good quality training and ongoing support would seem to be the gold standard in delivering the greatest improvement in financial capability outcomes for young people.
- Taking the evidence together, it would seem that a tiered approach to supporting financial education is appropriate that includes access to resources, teacher training and ongoing CPD and support via a programme of activities, such as those derived from the Centres of Excellence programme.

Sustainability

- Teacher training and CPD is a core part of Young Money's activities. This project represents an extension of the teacher training that Young Money provides, focusing on post-16 students and their teachers that have not specifically been targeted in previous programming. The lessons learnt from this project will be instrumental in the development of Young Money's CPD activities going forward. Young Money is keen to scale the project and continue

the development of its' Post-16 offer for teachers and young people, based on the lessons learnt from this project. This would include developing tailored resources and lesson plans for Key Stage 5, extending CPD teacher training for Post-16 teachers in England, Wales and Scotland and extending the reach of the Centres of Excellence programme. The above activities are dependent on securing support from funders and partner organisations.

Future developments

- This project represents the first major attempt to directly assess the impact that teacher training has on the students that the teachers go on to teach. This project therefore provides valuable new evidence of the impact of teacher training on students, as well as teachers. In order to assess the longer-term impact on the financial capability outcomes of young people, further longitudinal research is needed. There is potential to track the cohort of young people involved in this study and conduct follow-up research with them to track their ongoing financial capability development.

Mainstreaming provision

- The lack of a financial education curriculum for post-16 students clearly impacts on teacher confidence, resource allocation, time, focus and prioritisation of learning, and means that the impact of financial education on students is subject to variation depending on teachers' prior experience of financial matters and their motivation and interest, both of which can positively or negatively impact the outcome.
- Mainstreaming financial education for post-16 students depends on a nationally-agreed curriculum, supported by appropriate resources and learning materials. Financial education currently is not compulsory for post-16 students, despite teachers and students consistently voicing the importance of it, especially for this age group. As one teacher commented: *'I think it is something that all students should do, but I don't know how they could do that unless it's put on, like, a national curriculum or something... I'd be happy to vouch for it as well, you know, say it's a good thing to do.'* Another teacher called on the Government to *'do something in producing some kind of financial framework for PSHE students overall because for post-16 there was just nothing available and I think that's just, that's shocking to be honest, that from 16-18. It's kind of, "jog on, you're on your own."'*
- Unless financial education becomes fully mainstreamed it will continue to compete with other subjects for time in the timetable. Whilst financial education is part of PSHE, there are many subjects that need to be covered in a limited timetable, many of which are increasing in importance and relevance, such as mental health and relationship and sex education. Moreover, PSHE is not compulsory for post-16 students; the extent to which post-16 students are receiving financial education depends on the interest and enthusiasm of committed teachers.
- Further mainstreaming could be achieved through the inclusion of financial education in Initial Teacher Education programmes, ensuring that all newly qualified teachers have an appreciation of financial education and understand the relevance of it within the context of their specific subject.

6. Sharing and learning activity

The learning from the project will be used to inform and support best practice within all of Young Money's programmes which contain an element of teacher training. It will also inform any new programme developments, and be crucial in those respective discussions with partners and funders.

The results from this project also provide a much needed contribution to the evidence base for what works when considering financial education provision for young people.

6.1 Sharing and learning plan

We plan to share the findings of the project extensively, via:

- Submission onto the Money Advice Service Evidence Hub
- Sharing with stakeholders through our own internal channels such as social media, website and newsletters
- Using specific national and regional events such as our Centres of Excellence national conference to disseminate findings to teachers, which on average is attended by up to 200 teachers
- Distributing findings via our Financial Education Forum (run twice a year and attended by approximately 100 key stakeholders)
- Sharing with devolved nations through our licensed partners in YE Northern Ireland and YE Scotland
- Young Money is part of Young Enterprise, which is a member of the global not-for-profit organisation Junior Achievement Worldwide (JA WW), which operates in 123 countries across the globe, reaching more than ten million students each year. The outcomes of this project would make a very useful contribution to the whole of this network.

6.2 Sharing and learning activity

Events

To date, we have shared our project approach, our sharing & learning plan and our preliminary findings at the below events:

1. Money Advice Service 'What Works Fund Learning and Sharing Event' on 10th November
2. University of Edinburgh Business School Seminar Series 'Young Minds & Money' on 9th February

These were important opportunities to build awareness of the project and its aims, share preliminary findings with key stakeholders within the sector, and share and learn from other organisations and providers.

Sector groupings

Young Money's Head of Educator Facing Programmes and Services has also promoted the project at various sector groupings, including:

- London Financial Capability Forum, run by the Citizens Advice Bureau
- Children and Young People Financial Capability UK Steering Group

- Building Societies Association, which represents 43 member companies
- Youth Financial Capability Group
- Westminster Forum on financial inclusion
- Scottish Financial Education Forum

Downing Street Event

Young Money were pleased to welcome Charles Counsell and Andy Briscoe to the Young Enterprise event at 11 Downing Street in October, to introduce them to other stakeholders of the charity and of both financial and enterprise education. We were also pleased to host Charles Counsell at one of our teacher training sessions in London.

Financial Education Forum

Representatives from the Money Advice Service joined Young Money for the Financial Education Forum on 16th October 2017, a group that brings together c.100 stakeholders across financial education to share best practice, gain a wider understanding of projects and activities taking place, and to discuss the policy environment that is informing our space. At this Forum, Julian Knight MP presented (the newly appointed Chair of the APPG for Financial Education for Young People).

We will be inviting CYP What Works Fund grantees and representatives from MAS to share their findings at the October 2018 Financial Education forum.

Appendix 1 - Evidence Summaries

Year of publication	2018
Contact details for author (if available)	Tina.Harrison@ed.ac.uk
Programme delivered by (name of organisation)	Young Money
The Impact of Training Teachers to Teach Financial Education on the Students they Teach	A randomised control trial evaluating the impact of training teachers in financial education on the financial capability outcomes of the post-16 students they teach. Teachers in the Treatment group received training from Young Money. The evaluation comprised individually matched pre-and post- surveys; 101 teachers and 1,215 students across 93 schools in England.

Type of organisation	<input checked="" type="checkbox"/> Charity <input type="checkbox"/> Housing association <input type="checkbox"/> Think tank <input checked="" type="checkbox"/> University <input type="checkbox"/> Local authority <input type="checkbox"/> Professional body <input type="checkbox"/> Social Enterprise <input type="checkbox"/> Trade Association <input type="checkbox"/> Cooperative Society <input type="checkbox"/> Other
Project Location	<input checked="" type="checkbox"/> South East England <input checked="" type="checkbox"/> South West England <input checked="" type="checkbox"/> London <input checked="" type="checkbox"/> the Midlands <input checked="" type="checkbox"/> North East England <input checked="" type="checkbox"/> North West England <input type="checkbox"/> Scotland <input type="checkbox"/> Wales <input type="checkbox"/> Northern Ireland
	<input checked="" type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural
Type of intervention	<input type="checkbox"/> Existing intervention <input type="checkbox"/> Scaling up an existing intervention <input checked="" type="checkbox"/> Piloting a new approach
Life stage	<input checked="" type="checkbox"/> Children and young people <input checked="" type="checkbox"/> Young adults <input type="checkbox"/> Working age <input type="checkbox"/> Financial difficulty <input type="checkbox"/> Retirement planning <input type="checkbox"/> Older people in retirement
Segmentation*	<input checked="" type="checkbox"/> Struggling <input checked="" type="checkbox"/> Squeezed <input checked="" type="checkbox"/> Cushioned

Topic Addressed	<input type="checkbox"/> Saving <input type="checkbox"/> Pensions and retirement planning <input type="checkbox"/> Credit use and debt <input type="checkbox"/> Budgeting and keeping track <input type="checkbox"/> Insurance and protection <input checked="" type="checkbox"/> Financial education <input type="checkbox"/> Dealing with financial difficulties
Type of intervention**	<input checked="" type="checkbox"/> Workshops, group training <input type="checkbox"/> One-to-one advice (face to face) <input type="checkbox"/> Helpline/email advice <input type="checkbox"/> School workshops/ curriculum <input checked="" type="checkbox"/> Communication and messaging <input type="checkbox"/> Digital Tools (e.g. budgeting tools, apps, "money MOT") <input type="checkbox"/> Peer education/community champions <input checked="" type="checkbox"/> Training for teachers/other professional <input type="checkbox"/> Other,
Is the intervention delivered (entirely or in part) by volunteers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
What types of evaluation have you conducted? ***	<input type="checkbox"/> Process evaluation <input checked="" type="checkbox"/> Outcome evaluation <input type="checkbox"/> Impact evaluation <input type="checkbox"/> Cost-effectiveness analysis
FinCap outcomes measured by the project****	<input checked="" type="checkbox"/> Behavioural <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Managing Money Day to Day <input type="checkbox"/> Managing and Preparing for Life Events <input checked="" type="checkbox"/> Mindset (Attitudes and Motivation) <input checked="" type="checkbox"/> Ability (Skills and Knowledge) <input type="checkbox"/> Connection (Ease and Accessibility) <input checked="" type="checkbox"/> Other
What types of evaluation design did you use?	<input type="checkbox"/> Post intervention surveys only <input type="checkbox"/> Pre-and-post surveys, no control <input checked="" type="checkbox"/> Control group (receiving a different intervention or no intervention) <input type="checkbox"/> Sequential roll-out, stepped wedge <input type="checkbox"/> Other
Nesta standard of evidence *****	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input checked="" type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> Level 5

Appendix 2 – Research methods

WWFE Outcome	Research method
<p>Teachers:</p> <ul style="list-style-type: none"> • Teachers are more aware of resources to support them. • Teachers are more able to create financial education lesson plans and schemes of work independently. • Teachers understand how financial education fits in the curriculum and whole school level. • Teachers are better able to provide appropriate financial topics and contexts to meet the age, ability and need of students. <p>As a result:</p> <ul style="list-style-type: none"> • Teachers further develop pedagogical practice. • Teachers increase their confidence in delivering financial education. 	<p>Pre and post surveys of teachers</p> <p>Individual interviews with teachers</p> <p>Supported by:</p> <p>Post survey of trainers</p> <p>Focus group with trainers</p>
<p>Young people:</p> <ul style="list-style-type: none"> • Young people appreciate the importance of being financially capable. • Young people want to improve their level of financial capability • Young people speak about personal finances to their peers and/or parents. • Young people increase their financial capability in the 5 themes covered. 	<p>Pre and post surveys of Post-16 students</p> <p>Focus groups with Post-16 students</p>
<p>Trainers (process evaluation):</p> <ul style="list-style-type: none"> • Trainer’s perceptions of the appropriateness of the resources • Trainer’s perceptions of the effectiveness of resources in equipping teachers with increased confidence and pedagogical practice in delivering financial education • Trainers’ perceptions of the receptiveness of teachers and teachers’ reactions to the training. 	<p>Post survey of trainers</p> <p>Focus group with trainers</p>

Appendix 3 – School participation

Group	Target number	Number fully participating in evaluation	Notes
Treatment Group	60	46	62 schools/colleges originally registered. 9 schools had to leave the project due to personal or school circumstances. 2 schools were not able to attend the training, and were moved to the control group (but subsequently dropped out of the Control group). 6 schools participated in the project but did not submit all their post evaluation data.
Control Group	60	41	63 schools/colleges originally registered. 10 schools dropped out of the project due to a mixture of changes in personal circumstances or school circumstances. The remaining teachers did not manage to deliver their financial education within the timeframe of the project and could not complete the post-surveys, despite having participated in the pre-surveys.
Centres of Excellence	6	6	4 Accredited Centres of Excellence and 3 MAS funded new Centres of Excellence participating in the project. As additional Centre of Excellence was recruited to offset lower than expected teacher numbers per Centre of Excellence, due to staff availability and capacity. All 7 participated in the teacher and student surveys, but only 6 were finally included in the evaluation due to not being able to match the student surveys for one school.
Total number of schools	126	93	

Appendix 4 – Data collection

Method	Target number	Final number in the evaluation	Notes
Teachers:			
Pre- and post-surveys	180	101 fully matched pre- and post-surveys	Although 199 pre-surveys were collected, there were only 168 valid responses after de-duplication and further subsequent losses due to drop-outs from the project. 110 post-surveys were completed, with 107 valid responses after de-duplication. 101 surveys were fully matched; a handful of teachers who had completed the post-survey had not completed the pre-survey.
Individual interviews	20	20	All interviews were completed as expected, a mix of face-to-face and phone interviews.
Students:			
Pre- and post-surveys	2,400	1,215 fully matched pre- and post-surveys	Although 2,759 pre-surveys and 2,253 post-surveys were received, there were a large number of duplicates recorded (where students had started but not finished and then started a new survey) and a number of blank entries where students had opened the survey to have a look, but not answered the questions. Also, a number of schools subsequently dropped out of the project after completing the pre-survey. 1,215 pre- and post-surveys were fully matched; the remaining surveys were missing either a pre- or post-survey to match to.
Focus groups	6 to 7 groups	6	3 Control, 3 Treatment focus groups were conducted. The decision was taken not to conduct a focus group for the COE group as the number of schools taking part from the COE group was much smaller.
Trainers:			
Post-survey	8	8	Progressed according to plan
Focus group	1 group of 6	1 group of 6	Progressed according to plan

Appendix 5 – Qualitative Report

1. Introduction

A detailed summary of the schools, teachers and students taking part in the qualitative element of the research project is available in Table 1 below. All interviews took place between December 2017 and March 2018 following implementation of financial education in the participating schools. A variety of FE Colleges and schools teaching post-16 students took part across England, which included Treatment, Control and Centres of Excellence. There was a mixture of in-person interviews and Skype/phone interviews with teachers which lasted between 30 minutes and 80 minutes.

Pupil focus groups were undertaken in person with a teacher/teaching assistant present and they lasted between 20 minutes and around an hour. All teachers and students taking part received an Amazon voucher as a thank you. There was also a two-hour focus group with 6 of the Consultant trainers on the project, which gave helpful background to the training, the process and consultant involvement. All interviews were transcribed for the purposes of analysis. The analysis itself focused on a) supporting the quantitative analysis and thus addressing the key objectives of the project, b) exploring emerging themes to better understand the opportunities and barriers to financial education.

The findings are detailed below beginning with a section on understanding how and why schools and colleges became involved in the project. This is followed by sections looking at the important role of the motivation of the lead teacher and the diverse departments and structures within institutions which delivered financial education. The Report then goes on to directly support the objectives of the project by considering the differences in teacher and pupil feedback from Treatment, Control and Centres of Excellence schools/colleges as well as the five topic approach and quality of support materials. Finally, the barriers to financial capability development for post 16 teaching are summarised as well as opportunities for the future.

2. Teachers: becoming involved in the project

Most teachers saw the email from YE inviting applications to join the project. The timing appears to have been good as it landed whilst they were beginning to think about the next year's work plans. Most of the teachers were aware of the need to build financial education into the curriculum and saw this as an opportunity to gain resources and confidence, as the quote below summarises:

'...it must have come in the spring or summertime last year and I just, I don't know really, oh gosh, I don't know, I just thing the finance aspect...with my PSHE hat... I'm conscious that I know we don't do much on financing kind of education because I'm too, not too occupied, time's limited obviously, but you're too engrossed in doing careers, sex, relationships, all the other stuff that's on the agenda to kind of tick the finance box'

The teacher in the quote above was an experienced PSHE teacher not a Business Studies or Finance teacher and the demands on the curriculum and her time are clear. Even teachers that saw themselves as proficient with personal finance due to their subject teaching or background were not always sure where to start, as one Business/Maths teacher said, *'I like to be managed there because otherwise like everything it's too big and I'm thinking "Where do I go?" I'll just pick anything.'*

Sometimes, even where a teacher was keen to be involved, it often took *'a little persuasion'*, was *'negotiated'* or when they realised *'there was no cost'* reluctant schools were persuaded to take part and this starts to indicate the need for a motivated lead teacher to champion and drive financial education forward in schools/colleges.

3. Teacher motivation for involvement

It was highlighted by *all* teachers and the Consultants that teachers were busy so it was interesting to understand the motivations behind teachers taking on extra work. The reasons tended to fall into the following six, non-mutually exclusive, categories:

3.1 Past and current personal financial experience

The most impassioned teachers related the need for financial education to experiences in their own personal lives which had shaped their perception of the importance of financial education. For example, one Head of Sixth Form spoke of her childhood as the daughter of refugees and how her parents had inspired her and shown her the importance of hard work and saving:

'My dad had, I think four jobs a day when we first go to this country and he was doing college, night college for English but he was working on building sites for £2.50 an hour...'

and in turn such personal stories seemed to inspire the students,

'...he is my role model, because he came to England at the age of 31 and he's retired by the age of 52 and, you know, that's because he literally did what he had to do in order to not be poor or in a situation where we were uncomfortable... so in some ways the sessions were really inspiring because they [students] were like, wow, if they did that... what's my excuse?'

In a similar way some teachers were happy to share their own experiences of managing money well and not so well in their past, some even shared their salary and mortgage details to bring the subject to life. Older teachers with young adult children were also very aware of their own children's increasing financial independence and this drove a desire to focus on it more with their students, especially teachers who had a business or maths specialism.

3.2 Previous professional experience, current curriculum interest, future ambitions

Many specialist teachers in maths, business and finance had a previous employment history in business, finance or accounting and/or a finance qualification. This drove a personal interest in teaching financial education or the school delegated the teaching to them as the perceived experts. Furthermore, leading financial education teaching was sometimes seen as a career opportunity for teachers keen to move to more senior roles yet not in charge of a department yet. One ambitious young teacher saw his knowledge as an opportunity to create a career enhancing specialism:

'[finance] it's something which, its one area of the Business Studies curriculum which I've always enjoyed delivering. My degree is Accounting and Finance so I do have more of a finance background than the other areas.'

The background of some of these ex-finance professionals had made them passionate and confident in teaching financial education such as the following two teachers: *'... having taught financial literacy and thinking this is important... I've been trying to get it into PSHE and I just think it's something they should all be aware of and they're not.'* (Business and Maths Teacher) and *'Any chance of getting resources, any chances of pushing the agenda that finance is important to teach kids, I'm interested'* (Business Teacher and ex-Accountant).

Conversely, other business specialists saw involvement in the project very specifically as supporting the formally assessed curriculum: *'I've been teaching financial education as part of the BTEC Level 3 we deliver...we've only been using them with BTEC students'* and would not have taken part otherwise.

3.3 Sixth form specific responsibilities and 'talking to students'

Teacher involvement was sometimes part of their responsibility as post 16 teachers, regardless of their subject specialism. Some saw themselves as experts PSHE advisors to their school making them a key contact:

'I've been writing schemes of work and teaching all sorts of different bits of PSHE for 20 years so I kind of call myself an expert and not blowing my own trumpet but lots of people do come and ask me about things to do...'

Others were looking at ways to enhance the sixth form experience and saw financial education as preparing students for their future beyond school. Often this evolved from asking staff and students what they wanted to cover in PSHE/Enrichment time. Perhaps not surprisingly staff were often keen on improving financial education *'So it was coming from staff more strongly but some students mentioned it as well that they wanted to know more about finance, particularly to do with university but more general as well.'* More surprisingly to many of the teachers, financial capability was high on their students' lists as the following quotes show:

'talking to students and saying 'what kind of thing do you want to do in tutorial?' Nine times out of ten in these classes it [financial education] comes up, so I thought right I'm going to bite the bullet and let's just try it, so yes, I was quite keen to get involved'

'the students always say to me, we learn about all these different things in school and college but we don't learn the important stuff in terms of their student loans and mortgages, financial products.'

Overall, there was a clear appetite to include more financial education in sixth form teaching if not always a clear understanding of how to go about it.

3.4 Senior staff delegation

Perhaps the most reluctant teachers were those that had been asked/told to take part in financial education teaching. What was interesting here was that even where they were initially skeptical or felt over-stretched, once involved, particularly in the training session, they then tended to become more enthusiastic and often ambassadors of the project:

'There was another girl who was supposed to be doing it and then my Head Teacher passed it on to me to do... its because I teach, Business is my first subject and I'm Head of Sixth Form, so it fitted in really well... at first I was a little bit, oh gosh, it's more work. When I went on the course then it was really interesting so I was quite excited about doing it and seeing the difference.'

4. Where does financial education fit?

As there were a number of motivations for specific teachers taking on the responsibility of delivering the programme, the departmental ownership and delivery within the school was diverse. There were two routes to implementation:

4.1 Supporting the assessed curriculum

Sometimes only the Business-related students received the financial education and some teachers did note such students were usually the most pre-disposed to learning about money and finances – the danger being that they were preaching to the converted. Sometimes involvement in the project was wholly driven by a desire for more materials supporting the assessed curriculum. This was particularly the case with the BTEC course which now incorporates Personal as well as Business Finance. One teacher openly acknowledged he would not have taken part without this link but also acknowledged how supportive the materials had been: *'No, probably not [be involved beyond BTEC]. From a time aspect, no more, no less, you'd probably get, I would guess, teachers in school saying we've got so many work pressures'*

Where materials were used beyond the formally assessed curriculum, often it was Business, Finance and Economics students who were selected for the trial as there was a feeling that the

learning in some way supported their curriculum so it was appropriate to take *'time out'* of lessons:

'I used time out of my business lessons to do it, but it ties in as well I think, because they do a business finance course that's both personal and business finance...'

Even where material seemed to support the assessed curriculum, there could be difficulty getting departments involved. One teacher wanted to involve Business Studies more but *'it needs selling in more as off the curriculum and its difficult to bend them, they look at the course checklist and if it doesn't fit they aren't interested'*. Often Business teachers who did follow the programme were surprised at the breadth of life skills learnt and that *'next time'* they would widen participation. However, this was acknowledged as a *'sell'* into the senior teams and would rely on the motivation and drive from individual teachers to forward a wider participatory agenda due to competing demands on time.

4.2 PSHE and enrichment routes

The delivery of PSHE, Enrichment or other such programmes was not consistent or straightforward. Schools and Colleges fit non-assessed curriculum elements into the school year in various ways and in some FE Colleges a lack of contact time, or student desire to attend, often meant PSHE was not a priority at all: *'the main challenge is that Enrichment is off the curriculum so why bother for some, it is difficult to know how to motivate them [students]'*.

The PSHE curriculum itself is crowded so financial education is not necessarily given a high profile without someone championing it within the school (see section above). The range of teachers leading PSHE varied from RE experts to Media Studies to Business and Maths Teachers and sometimes PSHE was centrally coordinated by the Head of Sixth Form or a Deputy Head. The range of teaching styles was also diverse from:

- PSHE being taught in approximately half hour tutorial/form time in the mornings. Sometimes materials were cascaded down to form teachers from a lead teacher or the lead teacher delivered the classes to all Sixth form tutorial groups or occasionally they just used their own tutor group for the project.
- Some taught PSHE in hour lessons once or twice a week, often at unpopular teaching times, such as Friday afternoons.
- Some lectured to the sixth form as a whole via weekly assemblies
- Some set specific days aside for PSHE where students chose a topic of particular interest, if students were not interested in fincap in the first instance, it would not get chosen
- One school undertook the trial as an after school club run over several weeks.

Overall, teachers did seem to find the small group teaching more effective. The teacher who spoke to all 70 sixth formers in Assembly mused: *'I think if I was to do that again I'd do it through the form teachers and perhaps do like a proper little exercise...'* and many reflected on future years *'rolling out next year through form tutors'*.

5. Treatment group

A central objective of this study was to understand the differences between teachers and students who did take part in the training versus those in the control group and this will be discussed in detail next. Overall, there was little doubt that those teachers that had undertaken the training were more confident and focused on teaching around the core 5 themes. All had enjoyed the training days, the support and direction of the consultants (although they would have all liked more ongoing support) and many acknowledged that it was nice to get out of the school, meet other teachers and share ideas. When asked if they had kept in touch or started a network, surprisingly none had done so despite many having good intentions at the training day.

All teachers in this study preferred to be given direction, detailed materials, specific learning outcomes and lesson plans. Many alluded to being used to, and more confident, following *'strict'* syllabuses, especially where they were not as confident with the subject matter:

'And so I like to know exactly, I suppose, because I've always taught exam classes, so I've always had a very strict syllabus to follow, so I like that. Some people may not but I like having this is what you need to get across and do and tick.'

Often teachers suggested time pressures as a reason for preferring clear direction, yet as the teacher below shows, most also intended to customize materials to their own student needs and teaching styles:

'I liked this approach. I like being told what to do. I'm quite happy to, somebody says 'right this is what you want to do, you get on with it'. And so yes, because there were five distinct topics I found that really useful. And then I was able to make the resources and plan the time'.

This particular teacher had been a Financial Advisor prior to teaching and felt very confident but she was worried about other teachers who may have less experience:

'I felt comfortable with it. I don't think everybody on the course did because they were coming from different areas. And they didn't have the finance background that I had, whereas I was able to say "Oh yes, I can see that and, oh maybe I could develop that as well"'

There was evidence that some non-business/maths teachers lacked confidence initially but all non-specialist teachers had definitely valued the training and there seemed to be fewer issues than the quote above would suggest. However, many (specialist and non-specialist) teachers were definitely hoping for more specific learning objectives and lesson plans, which they could later quickly and simply customize, as suggested below:

'it created work for me because then I had to go and make all the resources. I think I made sort of three extensive PowerPoints and doing all the research. So I think, and I know it's probably difficult for them but if they'd actually produced some resources that the teachers could adapt, because they came up with ideas about what you could do, but not the actual kind of resource that the teacher could use in the classroom'

Despite this disappointment, they had used the 'free' resources given and generally used other sites to customize slides for their particular school/subject needs. Some teachers tried to deliver a version of the PowerPoint slides they were given, others spent approximately 30 minutes per lesson researching and developing themes. Those schools using the materials to supplement BTEC and other courses simply selected relevant material and largely ignored the rest. A summary of feedback on the training and materials is next followed by detail on the effectiveness and appropriateness of the 5 themed approach.

5.1 Usefulness of support materials: customise vs standardise

As discussed already there was an overwhelming desire for classroom ready materials ready to customise as quickly as possible for their particular students' situations. All teachers did stress the need for customization for their students as well as their own teaching styles and some found this easy to do so: *'I think quite easy to customize definitely. I think if I was to deliver it how they were I would struggle quite a bit... I've always struggled to deliver other people's lessons even if they're really good.'* but some were concerned with the time taken to customize. A further requirement was more specific signposting to clearly verified, labelled and easily to navigate online resources and worksheets.

5.2 YE website

The online YE resources did polarize opinion, perhaps because some teachers were hoping for more complete lesson plans and had not expected to be doing as much research in their own time. Teachers, such as in the quote above, did suggest activities were generally 'good' but also noted they would take too long to deliver or were not always pitched at post 16 level. Generally, schools found the resource more useful whereas colleges more often described materials as 'childish' or too 'baby-ish,' as the contrasting quotes below show:

'we got the login for those free resources, I forgot the name of them, whatever its called, I can't remember, so I must confess I primarily used those... I must confess I did think it would be quite dull if I'm brutally honest, and it wasn't...it taught me a bit of stuff as well but yeah, it was quite interesting that they actually thought it was quite interesting.'
(School Sixth form)

'A lot of it as well wasn't meant for, because I work in a college, so 16-18, so a lot of it was meant for younger students and there was just too much there...it just takes so long kind of opening ten files and thinking 'oh no, that's a bit baby-ish' or 'that's not what I'm after'' (FE College)

Both colleges and schools commented that resources better supported younger age groups and there was clearly a lot of information to filter. As a result, site navigation was sometimes highlighted as an issue for the YE site (as well as others) as teachers had hoped for more specific signposting to 16+ resources. The lack of signposting increased the time needed to locate and evaluate appropriate resources:

'... because they gave us a lot of websites to look at, but obviously this takes an inordinate amount of time looking at all the websites to get the kind of key information.'

There was variety between depth of engagement and teaching styles. Sometimes teachers had tried to share the material presented at the training day with very little additional resources consulted. Others had consulted a vast range of websites, newspaper headlines, statistics and resources used frequently including NatWest, Barclays, Government sites for tax and student loan sites, national press and pertinent news stories to stimulate discussion (eg the Kim Kardashian robbery in Paris).

To compound the complexity here, one pupil focus group specifically drew attention to the fact: *'seen as some of us are 17 and 18, [work sheets] should be a bit more advanced, it could give us more options on stuff to do really'*. However, at a different school the lead teacher thought the resources would be better for younger students yet she was surprised when her sixth formers elected to use them to train their peers. Most of these students were not specializing in Business or Finance courses so perhaps those who enjoyed and were studying finances felt more superior in knowledge than the rest of their peers in terms of what was perceived as *'babyish'*, thus highlighting the complexity in pitching support materials. Where there was usually commonality, however, was the teaching via the key 5 themes highlighted and discussed at the training day and these will be discussed further next.

5.3 The five themes

The themed approach seemed to lead to greater teacher confidence which led to more collegiate behavior and cascading of information through their institution. A benefit of the themed approach became evident to the teachers during lessons, where discussions broadened out beyond maths or finance to consider what was frequently referred to as *'real life'* discussions about future jobs, earnings, ambitions and societal responsibilities (eg tax); areas which had had limited focus or consideration in their past. Teachers were often shocked at the *'very limited'* view of the *'real world'* students had. The materials enabled flexibility; different students found different elements of interest and the themes seemed to deliver breadth of material to draw on depending on the students:

'different students picked out different things. So some said they were interested in jobs, some about safety online, some about kind of learning about the minimum wage, living wage, so they did all pick up different things which is good because normally they'll just all pick, you know, the same thing they liked'

Teachers were also surprised how students opened up about their own experiences which was often unexpected and created shared empathy, such as:

'It surprised me a little bit on the honesty of some of them, particularly the poorer students who were very honest about the situation. And it surprised me how unaware

some of the other students were, considering that they're peers and they talk and they work closely with them'.

One student mentioned her parents were moving house which sparked discussion on mortgages and selling a house. Part time job holders often led class, encouraging inclusion and debate:

'You say, 'right, who has a part time job? Who's got a payslip? So have you ever noticed this on your payslip? And the tax, have you ever had it back? And national insurance, and do you know why you don't get your national insurance back?' And that can be quite nice because obviously, a lot more of ours work because they are 16 plus and things like insurance, a lot of them are looking at car insurance...'

Teachers used a range of students' current experiences to draw out learning and make it relevant, for example car insurance and student loans. In summary *'a lot of it is trying to make it sort of appeal to them in a way where they can access it because until you are in the situation, and it might even be the smallest of things, you know asking the things like how much money do you get on your lunch card... how do you budget what you're going to eat...'*

Teachers were encouraged to focus on the five core themes emanating from previous research on financial capability (Harrison et al. 2017): Security and online safety, financial planning and budgeting, planning for work, financial products and financial advice. The structure of these themes were universally understood and well-liked by the Treatment schools and the Consultants where the life skills and *'real world'* focus was appreciated. Furthermore, all were very positive about the training days which seemed appropriately pitched as, *'we weren't taught how to suck eggs...'* and notably a good lunch was delivered!

Where the Training seemed most effective was where teachers used interesting and creative ways of working within the curriculum to deliver financial capability via *'maths crossover'*. For example, students taking Fashion and Design learning about money (led by a Maths teacher) as part of *'Design for Sale'*. Another school asked for student volunteers to research and deliver the five topics to their peers in tutorial as a leadership and CV building opportunity. A private school saw the development of their sixth formers' financial capability as a *'differentiator'* within the sector, preparing them for life beyond school.

In a number of schools, the Lead Teacher cascaded lesson plans to form teachers to enable them to deliver the material. Often it was acknowledged that some teachers had not been confident at the start and ultimately, had learnt a bit about managing their own finances. To counter a lack of confidence, a couple of lead teachers suggested 'Carousel' teaching in future with different stations looking at different elements of finance, enabling the more confident teachers to lead on the areas perceived as more difficult, Financial Products and Advice, for example. Despite such good practice, staff and students did acknowledge that activities which do not directly contribute to exam subjects, or without a clear syllabus, often did not get *'taken as seriously'* as summed up by the following teacher:

'when it's form time, sometimes it's not necessarily taken as seriously, whereas if it's a timetabled lesson with an actual structured scheme of work, with learning objectives each time and then maybe homework and then something that they can go home and discuss with parents and so on and so forth, I think it will be taken a lot more seriously.'

Once again, a call for a more structured and set curriculum, not just to help unconfident teachers and to save time but also to ensure financial capability is taken *'seriously'*. Specific feedback on the 5 themes will follow in the next section.

5.4 Theme 1: Fraud and identity theft

This topic was well liked by teachers and seen as a good way to start discussions around managing finances. It had by far the most unprompted mentions of all the topics. Notably, both teachers and students were surprised at how little they knew: *'they think they are IT savvy but actually they're not'* and *'I mean they were shocked. I showed them the video which we were*

shown in training and they were like ‘no way’’. Students also stressed the importance of this area:

‘the stuff on fraud and kind of keeping safe online and keeping your money safe, I felt that was really, really helpful so definitely keep that in because that’s really important, especially nowadays you know’

The school with peer teaching were confident that the video made everyone listen as *‘its quite a serious thing so people won’t much about as much.’* It was perhaps not a coincidence that there were very specific resources and direction for teachers in this particular topic, the video being particularly shocking. As a result, many were able to customize teaching materials quickly and build on previous work done in schools around safety online:

‘we already do safety online so I kind of built it into that as well and it would be financial things. It’s also about other things to keep safe online so employers in the future might look at your social media pages...’

In stark contrast this theme was often ignored or skipped over by those that were focused on supporting an assessed curriculum: *‘BTEC doesn’t cover is the identity fraud, so we did mention it briefly but because I’ve got their exam next week, I’ve really concentrated on the overlap bit which is the savings, the insurance, the bank accounts.’* Note in this quote how product and syllabus-led the curriculum approach can be here. Furthermore, those teachers who had not received training often assumed this element was covered in other areas of their school curriculum or that it was not specific enough to financial education to be a priority in the short teaching time available.

5.5 Theme 2: Financial planning and budgeting

This was a popular topic as students could use their own lives and experiences to help budget: *‘like budgeting we actually spent quite a bit of time on because there’s so many different areas of their lives where they will need to budget’*. The course materials prompted debates on life choices (e.g. smoking) and implications of loans which had often not been considered before. Thus this section was very relevant to their current lives but also in helping understand how leaving school will influence their future income and need for budgeting.

One teacher suggested splitting the curriculum between Y12 and Y13 with online security and financial planning and budgeting being the focus of Y12 and then as they move towards adulthood and work/higher education, Y13 focusing on the last 3 topics as more relevant in the final year. The emphasis on relevance to the students was further highlighted by one teacher: *‘..when I showed you at 13, they were like ‘I can’t be bothered’ but at 17-18 perhaps it’s something maybe we should be looking at doing, okay, you need to think about financial planning at 13-14 but it’s not necessarily the emphasis and relevance that we’re placing on it...it should be coming at 17’*. Similarly this relevance was echoed by students themselves as they often reflected that *‘I guess we can apply it now, especially with university coming up soon, seeing how we can save back some money and prepare for the future’*.

5.6 Theme 3: Financial implications of work

This third topic was sometimes seen as *‘a bit dull’* and *‘a bit dry’* and more difficult for teachers to research. Those that got the students more involved and used student, or their personal experiences, tended to get the most out of the session; *‘I used personal examples of the idea...I managed my borrowing, whereas my husband didn’t have any borrowing and then when we went to get a mortgage we couldn’t get one’*. Also where discussions were customized to the class – frequently starting with university – conversations broadened out around work and social responsibility. Financial discussions about tax led to greater discussion on government obligations. Understanding pay levels and costs associated with expensive cars led to students starting to think about their own futures more broadly, and possibly for the first time, as the following teacher reflected:

‘And it made them think as well about what they need to do to get the jobs because a lot of them want to be a lawyer or want to be this, want to be the other, it was a real reality check because some of them are realizing at this stage “I am not going to get to

that position so what other jobs could I look at, but also as well what do I need to be...what do I need to be planning”.

As salaries are rarely discussed, many students were shocked at pay scales: *‘like for example people though the Prime Minister would be paid £300k a year and she’s actually just paid £143K, things like that just shocked’*. Similarly, one set of private school students were shocked at minimum wage levels and carer wages. One teacher shared her salary with students to build their awareness that money *‘isn’t always easy to come by’* and often this was sobering for students but did generate the thought *‘what do I need to be planning’* as the above quote suggests. There was certainly evidence that students had started thinking seriously about their futures as a result of the session: *‘I mean one particular interesting point was a student said it actually helped him, partially influenced his choice of UCAS courses because of the work we did on jobs and salaries etc.’* And some were clearly discussing their learning at home with family, one student showing off to his parent that he understood tax bands, and another teacher wished to stress how much positive feedback he had received on the project from parents at a recent parents evening.

5.7 Themes 4 and 5: Seeking financial advice and choosing financial products

Although two separate sections, teachers tended to bring these two areas together and found it confusing to teach separately and would have preferred them, *‘more melded together’*. As in preparing for work, the timely nature of lessons at this point of transition was often discussed as a benefit, especially by students, with one stressing the need to check quality compared with price and shop around *‘they’re pretty basic things but they’re good things to know and remember’*. Some students did feedback that they were more worried now, often because it had made them think about the future responsibilities for the first time. *However*, if products did not seem relevant to them, teachers commented that students were not as engaged: *‘its not something they’re thinking about...they’re too young to take credit cards and things like that.’* This again highlights the importance of teaching to the transition, where students saw the relevance to their time of life so they seemed far more engaged and open to learning as long as teachers were also sensitive to student worries for the future too.

Interestingly, teachers with limited financial background found the two areas of financial products and advice the most challenging to teach yet they were by far the biggest focus of the Control Group sessions which will be discussed after an appreciation of differences between Treatment Groups and Centres of Excellence.

6. Centres of Excellence

Two Centres of Excellence (COE) lead teachers were interviewed for this study and both seemed very confident and comfortable with financial education, the training they had received and the delivery of lessons. One school had shared the lessons via PSHE teaching, the other to support the introduction of a new *‘real world maths’* assessed course in the school. Like other schools, the curriculum-led teacher noted that the material supported students beyond the curriculum, giving them *‘more worldly perspective’* and saw *‘opportunities to build’* and *‘push for a whole year group perspective’* in future years, perhaps in tutorials. Again, like other schools it did mean that this year, he did not focus as much on the popular fraud and identity module as keeping an eye on the assessment needs. In contrast the first school felt this was one of the most effective sessions.

Both schools were keen to show their credentials in financial education and their support of the COE approach. Rather than the discussion being an informal chat about the training and YE project, it felt more like one teacher in particular was trying to demonstrate how well they were doing and how focused they are on financial education (despite the interviewer stressing her independence as a researcher), as shown below:

‘I think the main thing is that we have a lot of emphasis on financial education. It is a big part of the curriculum, particularly higher up the school and to have that stamp, that certification that we’re a Centre of Excellence for it was a big thing’

Further, the second school stressed they needed to renew their COE accreditation. It should be noted that these circumstances *may* have affected the responses in the interview. Having said that, there was some interesting differences between the two COE schools and others in a) their confidence around the training, researching and delivery of materials b) ability to avoid teaching in silos c) student responses.

6.1 Confidence and focus

In terms of confidence, both schools seemed at ease with the approach, training and delivery of materials. They were experienced at teaching business, maths and finance and the training process had only made this easier for them. The second teacher noted that the five themes had made it easy to customize and focus teaching: *'the fact that these are so simplistic, and that's only meant in a positive way, it actually gives us the scope to go whichever direction it takes.'* This was supported by the first teacher who also stressed:

'having five units obviously gave us the guidance as to where to focus and where to look for our resources, it did you know, being able to show those units to the students at the start and map out what we were doing and why we were doing it.'

There was generally a greater ease and confidence about the COE teachers, often but not always present in other groups. They even spent less time planning lessons with the second teacher stressing between 15-20 minutes: *'So from a planning perspective that's fantastic amount of time to plan'*. However, this was not universal to all the themes, the first teacher did note that once they had set objectives they felt very confident but that they *'weren't particularly confident in, I suppose, setting those objectives in the start place, particularly the seeking of financial advice that could be anything...'* This suggests even the most qualified teachers would benefit from more clarity and guidance on the later topic areas.

6.2 Avoiding silos

It seemed that both schools had processes in place to drive through new ideas and avoid silo teaching, which was a problem in some of the other schools in this study. One school in particular explained a more group orientated approach to developing materials with 6 teachers taking part,

'we had meetings then to decide how we were going to narrow it down to have a specific focus in terms of what we would deliver per lesson. We then went and did some research, so we divided up the topics per member of staff. We did some research and then had another meeting presenting back what we'd found in terms of resources and put together two lessons.'

The teacher said he would advise other schools to take such a collegiate approach: *'the big piece of advice was to, like we had meetings. We had three meetings so we have a divide and conquer meeting, then we had a research feedback and then a final planning one'*. In terms of the second school, although materials were used to support a specific curriculum this year, the teacher saw no difficulty disseminating the material through the school in the future.

6.3 Student responses

Although the first teacher did acknowledge *'being slightly biased myself'* as a Business and IT teacher, he did believe:

'[financial education] does have a stronger influence than other areas in PSHE and students do respond to it better and it is a course which they look to do in sixth form'

He went on to suggest that being a COE school may have made it easier for his students to engage in the project as they had a baseline understanding of financial education from further down the school. When asked if perhaps they got less out of the project as a result, he said that it was about adapting to their changing needs: *'they need to be grappling with these topics to help themselves learn...I suppose using it [financial education] in the right context and using it to benefit them...is the main thing.'*

The second teacher realized from initial discussions *'their view on how things are in the real world was very limited'* yet overall felt students had become more interested in financial capability in recent years. As a norm in the school, but not specifically with regard to this project, financial education was disseminated by cascading learning via enthusiastic sixth formers:

'...to see their sort of enthusiasm for specifically things financial, you know, grow out of nowhere and... we get them [sixth form] to go down and teach the younger people about it as well, yeah, it's been really good'

Students, as in the Treatment and Control groups, often did *'come in with their own situations'* and like other teachers, the COE teacher admitted, *'to be honest that wasn't something I expected would happen'*. The research does seem to suggest that the training and 5-themed approach encourages student engagement and sharing of personal experiences with peers as well as younger students. This led to engaging group discussions on life decisions and,

'it's great from a teaching perspective but also you can see that they start to consider other people's points and sort of get that more rounded knowledge, which obviously is really good.'

6.4 Centres of Excellence: Summary

In summary, both teachers had enjoyed the project and saw real benefits now and in the future with the first teacher saying the project was *'on the whole entertaining, entertaining, engaging and useful to them [students]'*. And the second teacher noted, *'I've really enjoyed taking part in it and, obviously, it's given me loads more to build on.'* Both also did feel that their experience as COE teachers/schools did help and there was noticeably more confidence and synergy with financial education within these schools. Finally, on a broader note, several schools showed a real interest in becoming a Centre of Excellence seeing it as important for their students but also an important differentiator for their school that they could achieve such accreditation. The Control Group will now be considered, they had access to materials but no specific training to support their deliver of financial education.

7. Control group

Teachers in the Control group were more likely to ignore the themes and/or did not see them as important. This was particularly the case where they were supplementing core assessed courses such as BTEC Finance. Many teachers relied on their own subject expertise or personal experience to drive the lesson content. Often in the Control groups, teachers assumed the topics which students needed to know such as one school who had advertised the five themes/sessions in enrichment and 16 had signed up. The teacher had then decided to ignore the themes and focus mostly on car insurance as the school was in a relatively affluent area and this was a priority for her students. She felt the sessions had gone *'a lot better than anticipated'* yet the students in their focus group appeared a bit frustrated at the narrowness of the discussions which they felt were too focused on cars rather than broader learning: *'I'd like to learn more about mortgages and stuff and things and things that are going to affect my life quite soon in the future and how to deal with all that sort of thing'* and another wanted to know more about managing *'day to day life...'*. This was also evident when these students reflected on the main things they felt they had learned from the sessions, *'how much things cost, like your insurance and stuff, how to budget your spending and how taxes are imposed on things such as cars'*. It is easy to contrast their learning with the broader life learning evident in the Treatment Groups in Table Two below.

Conversely, some teachers asked students what they wanted to know and worked around that. The teacher below indicated the similarity between students in areas for discussion:

'I asked them to put on a Post-it note what do they actually want to learn about, what do they feel like is important. And then I collected it in and every class really the same kind of things were coming up which is interesting... The first things was student finance that they were desperate to know about... and then the products that were coming up or services where like mortgages, debit cards, credit cards. Those three things, they are the things they constantly hear about and didn't have any

understanding of...the other things that was coming up were things like interest rates and loans and things.'

Although good practice to ask students, it assumes that they know the questions that need to be answered. As the quote above shows, this usually led to rather a product focused approach which was not necessarily tailored to the actual needs of the age group as they transition from school. Teachers with limited financial understanding had felt rather cautious of talking about complex products such as pensions. Also the preparation for classes tended to be a bit longer than in the Treatment schools and this was particularly the case for the Special Education Needs (SEN) school involved. The teacher did plead for more materials supporting special needs teachers and students as a result.

There was less structure and consistency in lesson style and content from school to school and definitely less sharing/cascading of material between teachers in schools. The Treatment group schools looked towards students' future lives, stressing them taking financial control much more. In the Control group this opportunity seems to have been more often missed, with a greater focus on often complex products raised by the students themselves, yet not necessarily ones which help improve their near future now. To summarise, it is interesting to note the difference in comments between Control group students and Treatment group students when asked to summarise at the end of their sessions what they had learnt and how they felt.

Table 1: Student View of their own learning: Treatment versus Control

<i>Student focus groups: Treatment Schools</i>	<i>Student Focus groups: Control School</i>
<ul style="list-style-type: none"> • <i>'the thought of actually growing up'</i> • <i>'more financially aware'</i> • <i>'happy, confident, assured'</i> • <i>'not as scared'</i> • <i>'confident'</i> • <i>'worried, confident, reassured'</i> • <i>'Better feeling about it, confident, better understanding'</i> • <i>'more aware, more confident, reassured'</i> • <i>'comfortable, secure, cautious'</i> • <i>'life skills'</i> • <i>'just understanding everything a little bit'</i> • <i>'like [its] your responsibility maybe'</i> • <i>'it was helpful'</i> • <i>'I personally felt a bit more secure because I knew a bit more about it'</i> 	<ul style="list-style-type: none"> • <i>'More confident in insurance etc.'</i> • <i>'Passionate about finance, saving, car costs'</i> • <i>'more comfortable'</i> • <i>'confident and secure'</i> • <i>'interesting, factual, helpful'</i> • <i>'accounts, economics, business'</i> • <i>'student loans/finance, interest rates, types of account'</i> • <i>'How APR works, why banks pay interest'</i> • <i>'credit card – you can borrow money and are charged interest, debit card, your money'</i> • <i>'accounts, economics, business'</i> • <i>'debit cards, interest, maintenance allowance'</i>

In sharp contrast to the comments of the Treatment groups, the product focus did not seem to give as much opportunity to discuss wider *'real world'* issues that students are about to face and there is greater inconsistency in the subjects and emphasis of discussion. Often the important area of security online was ignored altogether yet such a priority and successful topic in the eyes of teachers and students in the Treatment Group.

Despite this seeming criticism, it should be noted that students in the Control Groups, were still generally positive about their experience so there were still benefits of a less focused, more product led teaching approach with comments like:

'I only put more comfortable. I didn't put confident because if somebody asked me could you sort out my finances, I'd be like, if you want to go bankrupt! But I would feel comfortable sorting my own finances out. If I knew I was going into an independent life I would feel comfortable. I wouldn't be scared necessarily... as opposed to before I'd done this.'

Interestingly, students were not afraid to be critical and suggest improvements to the delivery of material, such as the group discussed above which wanted less focus on car insurance. And where there had been large group lecturing, most of the focus group suggested *'activity not just listening', 'too big', 'did not like the way it was delivered, involve us a bit more and do it in a little group', 'there should be more activity'* and *'try to do it in lessons so we can discuss more'*. By aged 16+ it seems students are clear about what teaching style works for them, at least in this particular school.

8. Overall impression of student learning

Overall teachers were often surprised at how engaged students were in the subject in both Treatment and Control groups:

'it surprised me how engaged they were, that surprised me because at that age they're not always engaged. I thought they'd see it as a bit of a Mickey Mouse thing and does it really apply to me?' and,

'to see their sort of enthusiasm for specifically things financial, you know, grow out of nowhere

Some teachers, particularly in the control group, found topics polarized student engagement: *'the ones that they got into, they really got into, it was a bit famine or a feast.'* This was the first time of teaching and most teachers reflected on teaching styles, research and ideas which could improve future years especially on subject areas they were less confident teaching. Overall, where there was the breadth of discussion of *'their life'* both teachers and students seemed inspired, as one Maths teacher stressed:

'And personally to see the difference in the students the I've had this time in terms of just their wider understanding and consideration of things... and their awareness of making things that little bit more realistic in terms of their life and their future rather than just being taught things from a text book'

One teacher, initially dubious about the opportunity laughed at the students' response: *'I said 'have you enjoyed doing this?' and they said 'yeah, it's been alright', which is about the best you can get out of them'*. In summary, it seems students were open to listening and importantly sharing their financial experiences with their peers and teachers. They were often oblivious to their financial responsibilities until this awakening and particularly welcomed the *'real world'* preparation. Teachers welcomed the widening of discussions to include life skills and the opportunity to help future proof students beyond solely their financial matters. So given the seeming success of the programme, particularly in the Treatment and Centres of Excellence, it is also important to consider the potential barriers to introducing financial education in schools and colleges at post 16 level.

9. Challenges

9.1 Time and resource allocation

Time was a constant issue for teachers, not just in delivering the course but in setting up and attending hour long research interviews. Some apologized for eating lunch during interviews, others for being on call and there were frequent urgent interruptions. This gave a really simple snapshot into the demands on teaching. It was summed up by one head of Sixth form: *'its time, that's all it is. If someone said to me, you know, if you could have one wish, what would it be? It wouldn't be to teach less, it would be to have more time...'* Interestingly, those with additional admin/leadership responsibilities did recognize they could find time to develop materials, so were perhaps the best to target with future initiatives:

'I had time because, you know, I'm kind of in charge of the tutorial curriculum here so I get time out of class. I'm not sure how a teacher with a full timetable or something would have been able to kind of take it all in and create resources to cover everything.'

Overall the message was the same time and again – time and resources are stretched so the more support and direction to assist teachers the better as summarized succinctly below:

'Things like that are a godsend for teachers, anything that's straightforward...anything that we don't have to create from scratch ourselves because that's time consuming. And especially if you're not an expert in it because it involves a lot more research'

9.2 Budgets: The need for 'free' resources

The striking demand on budgets was brought into focus by one teacher stressing *'our PSHE budget for the whole school is £400, for the whole school, not just sixth form.'* which demonstrated how schools need to be creative with resources and opportunities. The same teacher stressed that with such a small budget even photocopying could not be afforded for example, and this often led the drive for more online resources/materials. This calls into focus the need for teacher access 'free' resources, training, teacher networks and resource hubs, whenever possible, to fuel the ability to deliver financial education at post 16 level.

9.3 Confidence

Confidence was often polarized between the Business/Maths specialists and those with previous financial knowledge versus the rest,

'it was something that I'd thought about, obviously thinking where do I start with confidently building resources to deliver a high standard? And having no experience in financial education at all, I was reluctant.'

It is important to stress that with guidance from fellow teachers and/or external support and presented with clear learning objectives and materials, such reluctance was definitely not insurmountable for all non-specialist teachers in this research.

9.4 Priorities and curriculum

Teachers are used to working to a specific curriculum with clear learning objectives, so the more help and direction the better. The lack of financial educational curriculum impacts on confidence, resource allocation, time and a lack of focus and prioritisation of learning, for example, the difference between the Treatment and Control Groups brings this into sharp focus in this study. A specific nationwide curriculum would help avoid such issues. However, as with most PSHE subjects, financial education is seen as an *'off curriculum'* subject and even with clearer understanding and sharing of the benefits for both teachers – and particularly students - it will always compete with the many other off curriculum subjects which are arguably equally as important. Where financial capability teaching is incorporated into the assessed curriculum, such as BTEC Stage 3, the danger is that only those assessed students gain a personal finance education, rather than the sixth form as a whole. Further, many schools, and particularly FE colleges, struggle with post 16 engagement with subjects not directly leading to a qualification. Although introducing something perceived as building the CV/Personal Statement can be an incentive for some students.

9.5 Detail please: 'desperate' to know about student finance

All teachers and students were asked if they felt anything was missing from the sessions. This was often a difficult question as has been discussed frequently in this report, students (and teachers) often don't know what they don't know. Nevertheless, a common theme did emerge around student loans and university financing:

'it's just about linking it sometimes to university so it means more to them. Because, as I said, most, I mean some of them get apprenticeships and things and will go to work, but most of them go to university so it's just about relating it to that really and that's a different kind of context I guess'

There were worrying pre-conceptions that loans were too expensive and a barrier to higher education, particularly in schools in mixed or deprived areas. It was felt that Student Loan Company/Government could do more to help clarify the situation and teachers and students were seeking more direction and support here too, not just in understanding the implications of

the loan, but how it is accessed, applied for, the actual amounts available and what that means for potentially living as a student.

10. Opportunities

Mostly, teachers were keen that more was done to support financial education in the future as the following quotes summarise. However, it should be noted that these teachers were likely to be enthusiastic as they had seen it as important enough to have taken part in the project in the first place:

'I think it is something that all students should do, but I don't know how they could do that unless it's put on, like, a national curriculum or something... I'd be happy to vouch for it as well, you know, say it's a good thing to do.'

'its something everyone needs to know. I think, yeh, its definitely adaptable because it's up to the people who are delivering it to know which aspect of it their students need to know about'

'they [Government] need to do something in producing some kind of financial framework for PSHE students overall because post-16 there was just nothing available and I think that's just, that's shocking to be honest, that from 16-18 it's kind of jog on, you're on your own.'

More surprisingly perhaps, students seemed as enthusiastic as their teachers. To garner a response, frequently the interviewer suggested she would find learning about finances a bit boring. Students were usually very assertive in their response, often using the word *'interesting'* and *'useful'* with the spectre of their up-and-coming transition to adult life always looming large: *'I didn't find it boring. It was interesting to know what life it's going to be ahead of you'*. And as one teacher suggested it was because *'kids like a purpose you see, rather than doing something for the love of learning'* and the imminent transition to higher education or work certainly delivered a stark purpose.

11. Final thoughts

To summarise, it felt appropriate to share strategies and ideas learned throughout the Report from consultants, teachers and students alike, as well as share opportunities and address issues emerging from the themes in this Qualitative Report:

- It seems sensible to target future email communication in spring/summer to fit in with the teachers' planning cycle when demands of the assessed curriculum are (a bit) less stressful. Secondly, although teachers stress that they do get a lot of emails, they also stress that they do forward relevant ones.
- In terms of communication, it is important to stress the availability of 'free' resources which support the financial education curriculum with clear learning objectives and also stressing such resources save both time and money will always be attractive to schools and colleges, as budgets are always going to be tight.
- Teachers are busy but additional planning time is given to those with additional leadership or admin roles so these may be the best to initially target with additional curricular activities such as financial education, for example, Deputy Heads, Heads of Sixth form, Head of PSHE, Head of Business/Finance/Maths.
- The creation of an ongoing Financial Education network targeted at teachers, giving advice and allowing a portal to share good practice and ask questions would be beneficial as teachers seek a curriculum, learning objectives and proven effective resources which they can customize easily. Many excellent ideas and approaches were shared during the interviews such as maths crossover, real examples of attempted scams from school IT department, Martin Lewis was very popular, follow up training, more case studies and practical examples, more statistics as headlines can shock and create debate and *'teachers don't have time to pull those stats out and actually they were massively useful'*. More interactivity, peer-to-peer learning and sharing was suggested. A greater focus on specific online resources was frequently wanted from

both students and staff (rather than paper based due to photocopying costs and convenient access), such as more online quizzes, 'virtual money' games, regular student diary blogs as assignments and specific help for special needs students.

- Student ideas included *'two or three minute videos that would just explain...'* on YouTube, guest speakers from finance background but also different professions/jobs, more about the practicality of university and student loans, more shock factors like the fraud video, more practical exercises to avoid *'daydreaming'* and looking at scenarios in groups *'...gets you working with other people and hearing what they would do and it gets you thinking about what you would do'*. A further suggestion was pulling the sessions together into one big day of financial capability learning/focused activities.
- Building on personal experiences of teachers and students allowed groups to open up, share experiences and improve understanding of others. It also garnered good feedback from parents, opening up discussions at home. This could be channeled more in schools, one school held an Open Evening on student finance for parents and perhaps parents could be encouraged further to discuss the transition from school to adulthood with their children via the support of the financial capability programme in sixth form.
- The Consultants were trusted and appreciated advisors for teachers and both the Consultants and teachers would have liked to make use of their expertise more often. Midway support during the year and an open helpline would be useful to build confidence and share good practice or teachers also suggested a 'drop in' session for financial education teachers led by Consultants.
- Splitting teaching between Y12 and 13 so there is not *'too much material'* and to ensure relevance to students may be a good idea. With Y12 focusing on safety online and financial planning and budgeting and Y13 building towards the transition to work and greater understanding of products and advice channels. As one teacher suggested: *'one thing that I've learnt about teaching post-16 is that they are very of the moment'* so relevance and timing is crucial.
- Official acknowledgement for students: Not necessarily formal accreditation or assessment, but teachers and students often mentioned the desire for some acknowledgement of financial capability development to help develop student CV and personal statements: *'.. they even said to me 'Can we have a certificate?' And, oh bless them, they're Y12 ...just something for the file or something...for their UCAS to throw in.'*
- Many teachers reflected that form time may be the best place to teach financial education due to the relationship with the form teacher, familiarity of peers and the (usually) 30-minute slot.
- The more structured and detailed learning outcomes, curriculum, materials and resources are the better, as this still allows the teachers to customize and develop their lesson plans but avoid too much additional work. In summary: creating more of the *'actual kind of resource that the teacher could use in the classroom'*. Focused, clear lesson plans would also ensure those with lesser financial experience as teachers were not *'bamboozled'* by an array of ideas and resources to visit.
- Ideally, all schools would nominate a lead financial education teacher and would have access to a training day and a Consultant. All those that attended had enjoyed training day and were increasingly motivated to take part. Consultants' were given universally positive feedback, although both teachers and Consultants would have liked more ongoing support or a mid-way drop in session.
- As a first step into schools/colleges, if materials are shown to directly support the delivery of specific financial education qualifications, such as BTEC, it is more likely to be adopted by cash and time strapped Specialist teachers. However, the danger of such an approach is that only students taking those subjects benefit from a broader financial education. Most Business teachers saw the wider benefits of financial education for students, even if they did not always know how to get it adopted more widely across the sixth form curriculum in their school/college. Interestingly the following teacher refers to *'they'* and stressed he was not directly involved in PSHE. Breaking down silos will be a challenge in some schools:

'You could do it as part of business but you wouldn't be hitting everybody if you did it as part of business, only those that had chosen it. So probably the best

place it would sit would be PSHE...I think it could be something that they would look at'

Stressing the potential for pupil involvement and discussion which has been generated beyond solely finances/money would increase the potential to move from a narrow curriculum supporting subject to a broader life-skill approach via PSHE.

- Understanding the motivations of potential lead teachers can help target materials appropriately. Ultimately, given the pull on teacher time and resources the best way forward would be involving school advocates who would 'love' to lead financial education. They are out there. Finding them and motivating their schools is key:

'Teachers, as you know are struggling with is all the extra hours we are spending outside of school to plan effective lessons just for our subjects. This is something, obviously at the moment, that I'm looking at and thinking is an additional extra so it's not something that I have to do, but it's something that I would definitely love to do and I think it would be something that the students would enjoy and get a lot out of'.

Appendix 6 – t-test results

Table 1: Teacher results

	Differences between pre- and post-surveys		Difference in difference between Treatment and Control
	Treatment	Control	
	Sig.	Sig.	Sig.
To what extent have your students' cultural, religious and socio-economic background been considered in financial education lesson planning?	.000	.051	.048
Have you used technology as part of the financial education delivery?	.001	.177	.096
Confidence	Sig.	Sig.	Sig.
How confident do you feel in designing financial education lesson plans?	.000	.000	.086
How confident do you feel in delivering financial education to your students?	.000	.011	.016
Thinking about your students' characteristics and identified needs, how confident do you feel in delivering tailored financial education?	.009	.136	.329

Table 2: Overall confidence managing money

	Differences between pre- and post-surveys		Difference in difference between Treatment and Control
	Treatment	Control	
Overall confidence managing money			
How confident do you feel managing your money?	.000	.209	.018

Table 3: Fraud and identity theft

	Differences between pre- and post-surveys		Difference in difference between Treatment and Control
	Treatment	Control	
How confident do you feel about:			
Choosing a secure bank PIN and keeping it safe.	.006	.073	.574
Keeping your phone/tablet/laptop safe when not in use.	.000	.472	.031
Protecting yourself from fraud and identity theft.	.000	.009	.001
Using privacy settings on social media sites (such as Facebook).	.000	.042	.316
Recognising fraudulent communications (e.g. emails, phone calls, texts etc.)	.000	.000	.029
Knowing where victims of fraud and identity theft can seek help.	.000	.000	.000

Table 4: Financial planning and budgeting

	Differences between pre- and post-surveys		Difference in difference between Treatment and Control
	Treatment	Control	
How important is it to you to:	Sig.	Sig.	Sig.
Keep track of how much money you are spending	.248	.000	.080
Know how much money you have	.539	.003	.094
Save money in case of emergencies	.010	.001	.577
Save up money for the future in general	.003	.000	.520
Save money to achieve your goals	.000	.000	.828
Plan your budget to include saving	.000	.000	.923
Attitudes:			
When it comes to money, I tend to live for today rather than plan for tomorrow.	.421	.460	.991
Saving is something you do if you have money left over.	.697	.048	.256
Saving should be done regularly in case you need money for something.	.444	.013	.275
I only save when I have something in mind to save up for.	.060	.128	.892
Nothing I do will make much difference to my money situation.	.876	.638	.653
Borrowing money is OK, but only if you can pay it back.	.949	.761	.863
I'd rather not borrow money.	.748	.661	.893
It's too much effort to keep track of spending.	.513	.046	.303

How confident do you feel about:			
Keeping track of your money.	.000	.068	.092
Knowing how to use a budget planning tool	.000	.000	.032
Setting a budget and sticking to it.	.000	.000	.299
Saving to meet a long-term goal.	.000	.000	.740
Controlling or adjusting your spending to fit the money you have.	.000	.000	.600

Table 5: Financial implications of work:

	Differences between pre- and post-surveys		Difference in difference between Treatment and Control
	Treatment	Control	
It's important to earn your own money	.619	.107	.150
Doing well at school gives you more job choices	.931	.797	.901
It's a good idea to get a part-time job when you're old enough	.578	.732	.522
I would like to be able to pay my own way as soon as I'm old enough	.372	.026	.363
It's fine to not earn money because others will make sure you have enough to get by	.008	.852	.084
I'm looking forward to having a job and earning my own money	.154	.673	.197
Your job is important to being able to provide for your future financially	.026	.743	.060
Having a job is the best way to be an independent person	.622	.021	.043

How confident do you feel that you:			
Understand what National Insurance is and why you have to pay it.	.000	.000	.110
Understand what Income Tax is and why you have to pay it.	.000	.000	.153
Know how to read a pay slip and understand what it tells you.	.000	.000	.530
Know that education is key to getting a good job and financial security.	.004	.691	.077
Understand that your job has an impact on the lifestyle you can lead.	.019	.082	.735

Table 6: Seeking financial advice

	Differences between pre- and post-surveys		Difference in difference between Treatment and Control
	Treatment	Control	
	Sig.	Sig.	Sig.
When it comes to financial advice, I don't know where to start.	.000	.143	.001
I would feel too embarrassed to seek professional advice about money problems.	.011	.391	.254
Financial advice is only for people who have money problems.	.809	.936	.823
I can sort out my own money issues, without seeking advice.	.030	.213	.606
Financial advice can help you to plan for your future.	.539	.396	.301
How confident do you feel that you:			
Know where to go for financial advice.	.000	.000	.016
Know what sources of advice are available	.000	.000	.041
Know what makes financial advice reliable or trustworthy.	.000	.000	.006
Know the difference between regulated and unregulated financial advice.	.000	.000	.010
Know where to get impartial advice.	.000	.000	.120
Know the advantages and disadvantages of paid for and free advice.	.000	.000	.006

Table 7: Choosing financial products

	Differences between pre- and post-surveys		Difference in difference between Treatment and Control
	Treatment sig.	Control sig.	
			Difference sig.
Financial decisions are among the most important decisions that we have to make.	.044	.016	.709
It is important to shop around before choosing financial products.	.000	.000	.129
I think I would make better financial decisions with the help of advice.	.002	.015	.576
When it comes to choosing financial products (like savings accounts, insurance etc.), I find there is not enough information out there that I can trust.	.832	.685	.660
Borrowing	Treatment sig.	Control sig.	Difference sig.
When you borrow money you will often be charged interest (you will pay back more than you borrow).	.835	.451	.685

All credit card providers charge the same amount of interest.	.192	.556	.618
Generally, the quicker you pay off a debt, the less interest you have to pay.	.240	.120	.784
Some types of borrowing are more expensive than others.	.402	.025	.307
Pay day loans usually have lower interest rates than credit cards.	.084	.116	.937
Student loans are a cheaper way to borrow money compared to other loans.	.000	.006	.354
You may be fined if you don't pay money back on time or you use an overdraft that hasn't been agreed with your bank.	.015	.100	.646
Insurance:	Treatment sig.	Control sig.	Difference sig.
You can get better deals on insurance if you shop around.	.001	.003	.970
If you own a car, you must have car insurance to drive it.	.194	.063	.027
If you own a mobile phone, you are required by law to insure it.	.722	.884	.885
All insurance policies have the same terms and conditions.	.346	.675	.731
Insurers can refuse to pay for things depending on the terms and conditions.	.697	.025	.147
How confident would you feel about explaining to a friend what each of the following is?	Treatment sig.	Control sig.	Difference sig.
Credit card	.000	.000	.038
Bank loan	.000	.000	.166
Payday loan	.000	.000	.115
Student loan	.000	.000	.003
Mortgage	.000	.000	.189
Overdraft	.000	.000	.050
Insurance	.000	.000	.050
Savings account	.000	.000	.111

Table 8: Impact of financial education on behaviour

	Difference between Treatment and Control (post-survey only)
Since receiving sessions on money management, have you done any of the following?	
Changed your password or PIN to make it more secure	.052
Changed the personal information you share on social media	.008
Downloaded or used a budgeting app or tool	.438
Started saving money/saving more money	.018
Used a comparison website	.061
Got a quote for insurance	.965
Got advice about student loans	.036

Appendix 7 – General Linear Models (Teachers)

Teacher outcomes	Overall significance	School factors		Teacher factors				Interactions
		Treatment or Control	IMD	Length of Service	Taught	Motivation	Confidence	
To what extent have your students' cultural, religious and socio-economic background been considered into the financial education lesson planning?	Sig at 1%	Sig at 5% p=0.039 v=0.504				Sig at 5% p=0.014 v=-0.340		
Have you used technology as part of the financial education delivery?	Sig at 5%				Sig at 5% p=0.011 v=0.696			
How confident do you feel in the following: designing financial education lesson plans?	Sig at 1%							Whether Taught and Confidence (5%, p=0.03). Coefficient of those who have not taught before for Confidence is -0.361
How confident do you feel in delivering financial education to your students?	Sig at 1%	Sig at 5% p=0.011 v=0.354		Sig At 5% p=0.012 v=0.372				
Thinking about your students' characteristics and identified needs, how confident do you feel in delivering tailored financial education?	Sig at 1%						Sig 1% p=0.009 v=.182	

Note: Only significant results are included. A blank cell denotes the factor was not significant.

Appendix 8 – General Linear Models (Students)

Student Financial Capability Outcomes	Overall Significance	School/student factors				Teacher factors				Interaction Terms
		Treatment Group	Gender	IMD	Free Meals	Teacher length of experience	Financial Education experience	Motivation	Confidence	
Table 1- OVERALL CONFIDENCE MANAGING MONEY										
How confident do you feel managing your money?	Sig 5%	Sig 1% p=0.000 v=.288			Sig 5% p=0.028 v=.003			Sig 1% p=0.003 v=-.058		Length of Service and Motivation (Sig 5%, p=0.017), Length of Service and Free Meals (Sig 5%, p=0.013) and Treatment group and Length of Service (Sig 5%, p=0.011)
Table 2- FRAUD AND IDENTITY THEFT										
How confident do you feel about keeping your phone/tablet/laptop safe when not in use?	Sig at 5%	Sig at 5% p=0.032 v=.125								
How confident do you feel about protecting yourself from fraud and identity theft?	Sig at 1%	Sig at 1% p=0.003 v=.215	Sig 5% p=0.022 v=-.164							

How confident do you feel recognising fraudulent communications (e.g. emails, phone calls, texts etc.)	Sig at 5%	Sig at 5%, p=0.029 v=-.149								
How confident do you feel about knowing where victims of fraud and identity theft can seek help?	Sig at 1%	Sig at 1% p=0.003 v=.427								Teaching Group and Gender (Sig 5%, p=0.038)
Table 3 - FINANCIAL PLANNING AND BUDGETING										
How confident do you feel about knowing how to use a budget planning tool?	Sig at 5%	Sig at 5% p=0.032 v=-.174								
Table 4 - FINANCIAL IMPLICATIONS OF WORK										
How confident do you feel that you know how to read a pay slip and understand what it tells you?	Sig at 5%									Treatment group and Free Meals is significant at (Sig 1%, p=0.004) level.
Table 5 - SEEKING FINANCIAL ADVICE										
How confident do you feel that you know where to go for financial advice?	Sig 1%		Sig at 1% p=0.000 v=-.172							Treatment Group and Gender (Sig 5%, p=0.021)

How confident do you feel that know what sources of advice are available?	Sig 1%	Sig 1% P=0.003 V=.287	Sig at 1% p=0.000 v=-.351			Sig 5% p=0.0132 v=-.023				Whether Taught and Length of Service (Sig 1%, p=0.002), IMD_Split and Free Meals (Sig 5%, p=0.013) and Length of Service and Free Meals (Sig at 5%, p =0.012)
How confident do you feel know what makes financial advice reliable or trustworthy?	Sig at 1%	Sig at 1% p=0.006 v=.226								
How confident do you feel that you know the difference between regulated and regulated financial advice?	Sig at 5%	Sig at 5% p=0.010 v=.236								
How confident do you feel that you know where to get impartial advice?	Sig at 1%	Sig at 1% p=0.002 v=.639		Sig 5% p=0.046 v=.071	Sig 1% p=0.003 v=-.015					Treatment Group and IMD_Split (1%, p=0.008)
How confident do you feel that you know the advantages and disadvantages of paid for and free advice?	Sig at 1%	Sig at 1% p=0.004 v=0.290	Sig at 1% p=0.001 v=-.319		Sig 5% p=0.014 v=-.013					Length of Service and Motivation (5%, p=0.028)
Table 6 - CHOOSING FINANCIAL PRODUCTS										
How confident would you feel about explaining to a friend what each of the following is? - Credit card	Sig at 5%	Sig 5% p=0.038 v=.167								

How confident would you feel about explaining to a friend what each of the following is? - Student loan	Sig at 1%	Sig at 1% p=0.004 v=.239								
How confident would you feel about explaining to a friend what each of the following is? - Savings account	Sig at 1%									IMD_Split and Motivation (at 1%, 0.000).
How confident would you feel about: - Choosing a financial product	Sig at 1%	Sig at 1% p=0.001 v=.297								Whether taught and Length of Service (5%, p=0.031).
How confident would you feel about: - Using advice to choose a financial product	Sig at 1%	Sig at 5% p=0.031 v=.398	Sig at 5% p=0.015 v=.021							Teaching group and Gender (1%, p=0.007)
How confident would you feel about: - Ensuring you get the best deal for your needs	Sig at 1%	Sig at 5% p=0.011 v=.209								Length of Service and Gender (1%, p=0.007)
How confident would you feel about: - Comparing the options available	Sig at 5%	Sig at 5% p=0.021 v=.189								

Note: Only significant results are included. A blank cell denotes the result was not significant.

Appendix 9 – Trainer findings

This section provides an overview of the findings from the trainer survey and focus group. Eight trainers delivered the financial education to teachers taking part in the treatment group. All eight trainers completed a survey and 6 of the trainers participated in a focus group discussion. The purpose was to gather feedback from trainers on their own reflections of the training resources and the training delivery model and their perceptions of the impact of the training on teachers. This provided understanding and evidence of:

- The appropriateness of the resources
- Trainers' perceptions of the effectiveness of resources in equipping teachers with increased confidence and pedagogical practice in delivering financial education
- Trainers' perceptions of the receptiveness of teachers and teachers' reactions to the training.

These findings are based on the 8 completed questionnaires only. Due to the small numbers, the data should be treated as qualitative data rather than quantitative data.

Training was delivered in two modes: regional training (to the teachers in the Treatment group) and Centres of Excellence (COE) training. All of the eight trainers had delivered regional training, but only three of them had delivered training to Centres of Excellence schools. In a small number of areas, slightly different results were obtained in relation to the COE training and are indicated below.

- All trainers that delivered regional training felt the training generally went very well. Two of the COE trainers felt that the training went slightly less well for the COE schools than for the regional training, but overall COE teachers still rated the training highly and the reaction from teachers was overall very positive.
- Trainers generally felt that teachers had learnt a lot from the training, although the scores were slightly lower for COE training compared to regional training. This is likely due to COE schools being at a more advanced starting point with regards to financial education.
- The training covered five main topics: (1) Fraud and Identity theft, (2) Financial planning and budgeting, (3) Financial implications of work, (4) Seeking advice, (5) Choosing financial products. The two topics that trainers felt had the most impact on teachers' learning were:
 - Fraud and Identity theft
 - Financial implications of work.
 - This was consistent across both regional and COE training and likely reflects the immediate relevance of these topics to this age group.
- The topics that trainers felt teachers found more challenging were:
 - Seeking financial advice
 - Choosing financial products
 - Trainers for the COE groups reported that teachers tended not to find any of the topics difficult (perhaps suggesting their more knowledgeable starting point).
- Trainers observed that the training was having a positive impact on the treatment schools in the following areas of teachers' practice:

- Design and development of teaching strategies for financial education
- Use of resources (including external resources/agencies) to facilitate financial education
- Use of digital technology in financial education
- Confidence in ability to design and deliver financial education lessons.

For the COE schools, trainers observed the greatest impact in relation to:

- Use of digital technology in financial education
- Approaches to assessment and evaluation of the effectiveness of financial education teaching (beyond initial design of teaching). This latter point does suggest that COE teachers may be at a more advanced stage, compared to teachers in the regional training.