Acknowledgements

We wish to express our sincere thanks to all the staff and young people who participated in the case-study strand of the evaluation and gave generously of their time. We would also like to thank the members of the project steering group, who have provided valuable information, support and guidance, including Rosalyn Xavier, Richard Page and Jodie Semp of the DCSF, and Scott Cohen, the National Double Club coordinator. We also wish to acknowledge the contribution of our NFER colleague Maureen Greenaway, who has provided excellent administrative support throughout the project.
Executive summary

The Double Club (DC) programme

Double Club (DC) is an in-school extension of the Playing for Success (PfS) programme, working with underachieving pupils in Key Stage (KS) 3 to improve attainment, particularly in literacy and numeracy. It provides an innovative ‘double experience’ that combines classroom education, with coaching in football or another sport. Young people attend at least twice a week in groups of approximately 15.

Double Club has been funded by the DCSF since 2004. By 2008 (at the start of this evaluation), DC consisted of 15 sports clubs; with 48 schools and approximately 3,000 young people. In April 2009, 15 new Double Clubs commenced operation, taking the total to 30 clubs working with 63 secondary schools and 2,497 pupils. In the academic year 2008/9, the vast majority of pupils attending DC were in Years 7 and 8 (only 159 were in Year 9).

About the evaluation

The evaluation of the DC programme was carried out for the Department for Children, Schools and Families (DCSF) by researchers based at the National Foundation for Educational Research (NFER). The DC evaluation was conducted in two strands.

- Strand 1 provided detailed qualitative data about how five case-study schools implemented the DC initiative, and how any positive impacts were achieved.

- Strand 2 examined the impact of DC on pupil attainment by obtaining relevant information about participating young people from DCs and matching this to the National Pupil Database. The research compared the KS3 progress of 448 DC pupils from 15 DC Centres with the progress of similar pupils who had not attended the programme.

The first strand of the evaluation presented findings from case-study visits to five DCs. Four of these DCs were selected as examples of ‘good practice’ (all of which were football-related) and the fifth was selected as an example of a DC which based its activities on a sport other then football. Four of the case-study visits took place during the summer term of 2008 and the fifth took place in the spring term of 2009. As part of each visit, the team carried out an interactive survey with young people participating in DC, using an Audience Response System (ARS). This system enabled young people to respond to a set of standard questions using a personal touchpad. A total of 51 young people participated in the ARS survey. More in-depth responses were gained through interviews with 20 young people, five DC Centre managers/DC coordinators, five DC teachers and seven members of school teaching staff.
The second strand of the evaluation provided an analysis of the impact of DC on pupil attainment, comparing the KS3 attainment of young people who had attended DC with the KS3 attainment of similar young people who had not attended, using a form of statistical analysis called multi-level modelling. We should stress that, although there may have been some overlap between the pupil samples for Strands 1 and 2, they were essentially different samples. Strand 2, by definition, could only include those pupils who had KS3 results available in 2008: these pupils were in the ‘older’ DC cohorts. By 2008/9, as noted above, less than ten per cent of DC pupils were in Year 9 and in many of the schools taking part, the DC project was designed specifically for pupils in Year 7.

Key findings
The evaluation identified four main models of programme organisation in the case-study DCs, each of which was felt to be appropriate in the local context:

1. Full-time DC teacher based in each participating school.
2. DC delivered by a teacher who is not based in the school.
3. DC delivered by a member of school’s own teaching staff.
4. DC delivered by both a DC teacher not based in the school and members of the school teaching staff.

- The evidence from the five case studies suggested that DC had been successful in achieving its aims of motivating and re-engaging underachieving young people.
- Teachers and young people perceived the DC programme very positively. They saw it as an opportunity for lower-attaining young people to access additional support with their learning.
- Young people reported that they enjoyed taking part in DC. Most young people thought DC had helped them to improve their learning (especially in literacy) and their self-confidence.
- All interviewees thought that young people’s school attendance had improved during their participation in DC, and one school provided evidence to support this.
- Local evaluation results showed that the majority of young people made progress in an adapted KS2 English test (30 out of 43 improved by one or two levels).

More robust statistical analyses, however, conducted during Strand 2 of the evaluation, found DC to have negative associations with KS3 attainment. Controlling as far as possible for differences between pupils who had attended DC and those who had not, these analyses found that pupils who had attended DC had achieved on average 0.28 of a KS3 level lower in English than those who had not attended DC. In mathematics, pupils who had attended DC achieved on average 0.32 of a KS3 level lower than the comparison group who had not attended DC. (For full details, see appendices in the main report).
The exception to these negative associations was a finding that very low attaining pupils at KS2 (defined as being at level 2 or below in English) who attended DC made more progress in English between KS2 and KS3 than very low attainers who had not attended DC, although the effect is so small that it is unlikely\(^1\) to be of statistical significance.

Key features identified by participants as promoting the success of DC were:

1. The programme’s appeal to schools and young people (the focus on basic skills combined with the popularity of professional sport).
2. Pupil selection (in particular selecting young people who had levels of literacy and numeracy below the expected level for their age, an interest in the sport offered by the DC and those who lacked self-confidence).
3. Learning content, style and environment (offering a motivating and attractive learning experience).
4. The added value of the sports coaching sessions (promoting sports skills, teamwork and enjoyment).

Conclusions

The evaluation consisted of two complementary methodological strands, one qualitative and one quantitative. Evidence from Strand 1, based on five qualitative case studies, suggests that DC was achieving its core objectives. It was having a positive impact on pupils’ motivation and self-esteem, with young people reporting that they worked hard in DC sessions and that they felt more confident and able to contribute in their other lessons. The programme was viewed as being engaging, motivating, well planned and with the appropriate levels of adaptability and flexibility.

The statistical analyses in Strand 2 did not identify any statistically significant positive outcomes in DC pupils’ attainment, and in fact found negative associations.

There are several possible explanations for these apparently contradictory findings, including the fact that the two strands used different samples, with Strand 1 focused predominantly on Years 7 and 8. It is also worth stressing that the statistical modelling may not have been able to account fully for differences between DC pupils and the comparison group. The negative associations found in Strand 2 may well indicate an inadequacy in our statistical models: pupils in the comparison group may, in reality, not have the same level of needs, as those in the DC sample, and the statistical models may not have been able to capture this.

We should also point out that the two strands measured different outcomes. Strand 2 focused on attainment data, while Strand 1 examined a much broader range of outcomes, including pupil attitudes. The school-based assessment results reported in Strand 1 were collected while pupils were still attending DC, whereas results used in Strand 2 took were recorded some

\(^1\) This finding was not tested for statistical significance. It would not have been possible to run separate models to test the potential effect of DC on pupils with specific prior attainment scores due to the small number of pupils involved.
time after pupils had taken part. The two strands covered different periods of time: Strand 1 included information collected in 2008/9, whereas Stand 2 collected data from pupils who attended DC from 2005 to 2008. It therefore included results from DC Centres at an earlier stage of development.

The evaluation concludes that, overall, the DC has been a positive programme because, to date, it has been successful in achieving the majority of its aims, and therefore, the research team would recommend continued funding for the initiative. The case-study research, which was based on data collected from the more ‘typical’ DC year groups of 7 and 8, produced positive findings, especially in relation to the attendance, motivation and engagement of DC learners. Although the statistical analyses, based on ‘less typical’ older DC cohorts, produced some negative findings, it should be stressed that these are not ‘causal’ findings – there are several factors, some of which are unrelated to DC provision, which could explain these associations. These analyses do flag up the need, however, for continued scrutiny of the impact of DC on pupil attainment in the future. We recommend adoption of a randomised control trial design for any future evaluation of impact on pupil attainment.
1. Introduction

1.1 The Double Club programme

The Double Club programme was established in 1998, by Arsenal in the Community. The programme aimed to provide young people with a ‘double experience’ of classroom-based learning through football, together with a football coaching session. It was developed to motivate and re-engage underachieving young people and to improve attainment, by harnessing young people’s interest in football. Originally, the programme operated as an after school literacy programme in primary schools. By 2004, however, the project had developed different modules, including numeracy and ICT, and was being run during curriculum time as a KS3 programme.

The Department for Children, Families and Schools (DCSF) has contributed funding towards the KS3 programme since 2004. The Department provides funding to cover the essential costs of the programme and has asked Arsenal in the Community to work with other English sports clubs to help set up and develop DCs (DCs) in their local schools. In 2006/07, seven sports clubs, through their Playing for Success (PfS) Centres\(^2\), were running DCs in one or more of their secondary schools. By 2007/08, the number of sports clubs involved had risen to 15, with 48 schools and about 3000 secondary young people participating in the programme. In April 2009, 15 new Double Clubs began operating, taking the total to 30 clubs working with a total of 63 secondary schools and 2,497 pupils participating. In the academic year 2008/9, the vast majority of these pupils were in Years 7 and 8 (only 159 were in Year 9).

\(^2\) PfS was based on partnerships between the DCSF, local authorities and a wide range of sports organisations. Through the PfS initiative, Study Support Centres were established at a range of professional sports clubs. PfS uses the sports environment to motivate and raise the educational standards of underachieving pupils, focusing on numeracy, literacy and ICT at Key Stages 2 and 3. Typically, each pupil receives 20 hours tuition.
2. **About the research**

The evaluation of DC was carried out on behalf of the DCSF by a team at the National Foundation for Educational Research (NFER). The aims, design and methods of the study are outlined below.

2.1 **Aims of the study**

The main aims of this evaluation were to assess the effectiveness of the DC programme, to identify good practice and to provide evidence on how best to operationalise DCs in a wider roll out. The study has sought to address the following research questions:

1. How has the DC programme been implemented in different schools?
2. To what extent has DC achieved its objectives, and how have these been achieved?
3. What has been the impact of DC on pupils’ motivation and self-esteem, and what were pupils’ and teachers’ perceptions of the programme?
4. What impact has DC had on pupil attainment?
5. Have some models of the DC scheme been more effective than others?

2.2 **Design and methods**

The research design combined an analysis of qualitative data to illustrate key processes with analyses of large-scale pupil outcomes data. There were two strands to the evaluation:

- **Strand 1** focused on the implementation of DC, its impact on pupil motivation and self-esteem, and perceptions of the programme in five DCs. It provided qualitative data about how schools have implemented the initiative, and how any positive impacts have been achieved.

- **Strand 2** of the study sought, as far as possible, to establish the impact of DC on pupil attainment by obtaining relevant information about participating young people from DCs and matching this to data from the National Pupil Database. The progress of DC pupils in KS3 was then compared with the progress of similar pupils who had not participated in the programme.

For Strand 1 of the research, five DCs were selected to reflect the different models of the programme in operation. Advice on selection was received from the National DC coordinator. Four of the schools were selected as good practice schools (all of which were football-related) and the fifth was selected as an example of a DC which based its activities on a sport other than football. These schools were not necessarily representative of all DCs, but they were in a position to provide useful information for other sports clubs and schools running, or considering running, a DC. The evaluation team made
visits to four of the five case-study DCs during the summer term of 2008, and visited the fifth case-study DC in January 2009.

As part of each visit, the team carried out an interactive survey with young people participating in DC using an ARS. This system enabled young people to respond to a set of standard questions using a personal touchpad. Their responses were then collated and displayed on a screen. More in-depth responses were gained from paired interviews with young people, interviews with members of school staff, and interviews with Centre managers/DC coordinators and DC teachers. In total, we interviewed:

- 20 young people
- seven members of school teaching staff
- five DC teachers
- five Centre managers/DC coordinators.

In addition, a total of 51 young people participated in the audience response survey (ranging from nine to 13 young people in each school). These numbers reflected the numbers of young people participating in DC in each of the case-study schools. The young people involved in the interviews also took part in the interactive survey.

Strand 1 of the research was carried out some months before the data was available for Strand 2. The findings from Strand 1 were therefore published as an interim report (see Wilson et al., 2009). The findings from Strand 1 are also reported again here, alongside the findings from Strand 2, in order to provide a complete overview of the whole evaluation.

In Strand 2 of the research, we used the National Pupil Database (NPD) to compare the KS3 English and mathematics attainment in 2007/08 of young people who had attended DC, to a matched comparison group of young people who had not attended DC. This strand of analysis provides evidence for research questions four (impact on attainment) and five (effectiveness of different DC models).

It should be stressed that, although there was some overlap between the Strand 1 and Strand 2 samples, they were different in both size and nature. As noted above, the audience response surveys in the case-study visits (Strand 1) featured 51 young people from five schools participating in the DC initiative (20 of these 51 pupils were also interviewed). These young people were in five case-study schools four of which were selected on the basis of demonstrating good practice. They were in the classes and year groups that were participating in DC at the time of the case-study visits. The Strand 2 sample could only include pupils who had attended DC and had taken their National Curriculum KS3 assessments by the end of the academic year 2007/8: these were therefore the ‘older’ DC cohorts. By 2008/9, as noted

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3 The visit took place later, as it was not possible to arrange a visit during the summer term.

4 The NPD is a ‘data warehouse’ which brings together value-added national performance data with pupil-level information from the Pupil Level Annual Schools Census (PLASC). It links pupil performance in Key Stage 1, 2 and 3 assessments to GCSE/GNVQ results, thereby providing the means to identify pupil performance at a given point in time and progress from one Key Stage to the next, taking important pupil characteristics into account.
above, less than ten per cent of DC pupils were in Year 9, and in many of the schools taking part the DC project was designed specifically for Year 7 pupils. For Strand 2 of the study, pupil outcome information was requested on pupils from all the 15 DCs that were operating in 2007/8. The final Strand 2 sample consisted of 448 young people from nine DC Centres.

The statistical modelling allowed the research team to address questions such as whether there was any evidence that pupils attending DC improved their progress between KS2 and KS3 over and above what might be expected; as well as whether more specific aspects of DC (number of hours spent in class sessions, and in sports coaching sessions) were associated with improved progress between these Key Stages. We were also able to look at whether different centres and models of DC had different relationships with pupil progress between KS2 and 3.

It was of particular interest to examine the prior attainment of pupils in KS2, as previous studies had found that there was differential performance among the pupils who attended Playing for Success Centres according to ability (see Sharp et al., 2007). Pupils with low prior attainment who attended PfS made greater progress at KS2, 3 and 4 than a comparison group of low attaining young people who had not attended PfS. However, relatively higher attainers who had attended PfS did less well in KS2, 3 and 4 than higher attainers in the comparison group.

We also examined whether the timing of pupils’ involvement in DC affected progress from KS2 to KS3. This was because pupils may have attended DC up to three years before taking end of KS3 assessments (for pupils attending during the first term of Year 7) or the interval could have been as little as one month (for those attending during the spring term of Year 9 and taking their assessments in 2008).

Further information about the selection of the matched pupil comparison group, and the statistical analyses, can be found in Appendix 2.

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5 Full details of the year groups and the numbers of pupils who had completed KS3 by the time of the research (and were therefore eligible for the Strand 2 sample) are provided in Table A2.1 in Appendix 2.

6 In the PfS study low attaining pupils were defined as those who had performed below the expected levels for their key stage and subject: for example, below level 2 in Key Stage 1 mathematics and/or below level 4 for Key Stage 2 mathematics.
3. Main findings

This section reports the main findings from Strands 1 and 2 of the evaluation, based on visits to case-study DCs and schools, and statistical analyses of national pupil attainment data.

The key findings are as follows:

- The evaluation identified four main models of organisation in the case-study DCs:
  1. Full-time DC teacher based in each participating school.
  2. DC delivered by a teacher not based in the school.
  3. DC delivered by a member of school’s own teaching staff.
  4. DC delivered by both a DC teacher not based in the school and members of the school teaching staff.
- Each model was felt to be appropriate in the local context.
- Young people enjoyed taking part in DC. Most thought that DC had helped them to improve their learning (especially writing and reading) and self-confidence.
- Local evaluation results indicated that young people attending DC made progress in an adapted Key Stage 2 English test (30 out of 43 improved by one or two levels).
- However, more robust statistical analyses in Strand 2 which controlled for the influence of other key factors which can affect attainment (such as gender and prior attainment) did not identify any statistically significant positive outcomes in DC pupils’ attainment, and in fact found negative associations. (This apparently contradictory finding may be due to the fact that Strands 1 and 2 used different pupil samples and measures, and/or to the inability of statistical modelling to account for differences between DC and the comparison group).
- All interviewees thought that young people’s school attendance had improved during their participation in DC, and one school provided evidence to support this.
- School staff identified several organisational benefits from their involvement in DC, including raising achievement for participating pupils and providing a broader curriculum offer.
- Key aspects identified by participants as promoting the success of DC in achieving its aims were: the programme’s appeal (learning linked to professional sport); selecting the right pupils; providing a relevant and engaging programme of work in a supportive environment; and providing opportunities to play sports.
- Young people said they found the work in DC more interesting and easier to understand than school lessons.
- The opportunity to play sport and to receive coaching attracted many young people to take part. However, a minority were not particularly interested in this aspect of DC.
3.1 How the Double Club is operating in schools

The five DCs visited had been operating for varying lengths of time, ranging from one to five years. Four of the DCs were associated with football clubs, and one with a club representing another sport. The number of secondary schools involved with the programme, in the case-study areas, ranged from one to ten.

3.1.1 Models of organisation and delivery

As Figure 1 shows, each of the DC case studies approached the delivery of the programme in a different way. There were differences in the background, employment, funding and deployment of staff. There appeared to be four main models of DC organisation and delivery:

1. Full-time DC teacher based in each participating school.
2. External DC teachers coming in to schools to deliver DC sessions.
3. DC sessions delivered by member of school teaching staff.
4. DC sessions delivered by both an external DC teacher, and members of school teaching staff.

Other DCs may have different models in place, but this was not explored as part of this evaluation.
### Approaches to implementing double Club (DC) in case-study schools

<table>
<thead>
<tr>
<th>Double Club 1</th>
<th>4 schools participating [Model 1]</th>
<th>Location: One full-time teacher based in each school Funding: Salary cost of DC teacher covered by school</th>
<th>Case-study school</th>
<th>DC teacher Background: PE teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th year of programme</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Double Club 2</th>
<th>10 schools participating [Model 3]</th>
<th>Location: Full-time DC coordinator manages DC across all 10 schools in area. Funding: DCSF-funded DC coaches provide coaching sessions. Schools provide member of staff to deliver DC</th>
<th>Case-study school</th>
<th>Member of school staff Background: PE and social studies teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd year of programme</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Double Club 3</th>
<th>2 schools participating [Model 2]</th>
<th>Location: Part-time, peripatetic DC teacher works in the two schools Funding: Salary of DC teacher and community coach paid by Centre. No cost to schools</th>
<th>Case-study school</th>
<th>Community coach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year of programme</td>
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</table>

<table>
<thead>
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<th>Double Club 4</th>
<th>3 schools participating [Model 2]</th>
<th>Location: Full-time DC teacher works in the 3 schools Funding: Salary costs of DC teacher shared between the three schools</th>
<th>Case-study school</th>
<th>DC teacher Background: PE teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd year of programme</td>
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</table>

<table>
<thead>
<tr>
<th>Double Club 5</th>
<th>1 school participating [Model 4]</th>
<th>Location: Part-time, peripatetic DC teacher based in school and runs DC with school staff Funding: All staff DCSF funded</th>
<th>Case-study school</th>
<th>DC teachers Background: community coach, HLTA and inclusion manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd year of programme</td>
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</tbody>
</table>
Model 1: Full-time DC teacher based in each participating school

In one DC, a full-time DC teacher was based in each of the participating schools, delivering both the classroom and football coaching sessions. The participating schools paid the salary costs of their DC teacher.

Model 2: External DC teachers delivered DC sessions

In two of the DCs, peripatetic teachers came in to school to deliver DC sessions. In one of these clubs, the salary cost of the DC teacher was shared between the three participating schools. The DC teacher in this area provided the classroom and the coaching sessions. In the other club, the salary cost of the DC teacher was absorbed by the local football club’s community trust. The community trust in this area also provided a coach to deliver football sessions outside of school hours, at no cost to the schools.

One of the key reasons for taking this approach to delivering the DC programme was a concern that schools would not be able to, or be interested in, fully funding the programme. One club had discussed possible models with interested schools and while it was felt that individual schools could not cover the salary costs of a full-time DC teacher, sharing the costs of a teacher between three schools would be more manageable. In the other area, the decision was taken to provide the programme at no cost to the two participating schools. In this case, the DC programme was running at a financial loss. However, the community trust had decided to keep funding the DC initiative, as they felt it had a positive impact on participating young people, and had been very well received by schools.

Model 3: DC sessions delivered by member of school teaching staff

In the fourth DC area, participating schools provided a member of their own teaching staff to deliver the DC sessions. The Club offered to provide community coaches to run football sessions at no additional cost to the schools. However, in the school we visited, the DC teacher was a qualified P.E. teacher and the school was a strong football school, and so the decision had been taken to have the same member of teaching staff deliver both the classroom session and the football coaching. A full-time DC coordinator, funded through the Football Foundation, managed the delivery of DC across all participating schools, providing resources and advice to DC teachers or help with classroom skills. This model was adopted because it was felt to be the best way of maximising the number of schools able to participate in the DC programme. Ten schools were running DC sessions in this area.

Model 4: DC sessions delivered by both an external DC teacher and members of school teaching staff

In the fifth Double Club, DC sessions were delivered by two members of school staff: a higher level teaching assistant (HLTA) and an inclusion manager; and an external DC teacher employed by the sports club. The HLTA planned and delivered the literacy and numeracy lessons, with assistance from the external DC teacher who adapted the lesson materials to make them relevant to the local sports club. The external DC teacher led lessons on healthy living and the sports sessions, with assistance from the HLTA. For all lessons, the class (consisting of up to 20 young people) was
divided into three ‘teams’, with the three members of staff working with one team each. In this DC, staffing costs were covered by the DC funding received from the DCSF. This was the only secondary school involved in the DC initiative in this area.

It should be noted that, in the case-study areas where DC teachers were external to the school, members of school staff told us that they had a good working relationship with the DC teacher and that communication between the DC teacher and the school was excellent. In one case-study area, participating schools had been actively involved in the recruitment of the DC teacher, and on appointment, the DC coordinator had arranged for the DC teacher to meet with key members of school staff before the programme began.

DC teachers and members of teaching staff worked together to identify pupils they thought would benefit most from the programme, and information and feedback on participating young people’s progress was shared throughout the programme.

In three of the five case-study areas, volunteers helped to run the DC classroom sessions. Work experience and gap year students helped in two schools, in order to give them an opportunity to experience working in a non-traditional educational setting. In another school, the assistant head of year provided additional support and a member of the school administration team gave up her free time to work on a one-to-one basis with the young people in the class. Members of school staff also regularly observed DC classroom lessons in order to develop their understanding of the programme, with a view to running DC in school themselves in future.

3.1.2 Selecting young people to participate in Double Club

All of the schools visited became involved in DC because they wished to motivate and re-engage underachieving young people and improve attainment levels in their school. Two of the schools had high numbers of young people with English as an additional language (EAL) and were seeking to improve young people’s communication skills.

The schools decided which year groups they would like to involve in the programme. DC teachers then worked with members of the school staff (such as learning support coordinators and heads of year) to identify young people whom they thought would benefit most from the programme.

3.1.3 Year groups and number of young people involved

The case-study DCs involved a range of year groups and cohorts of young people in KS3. In most of the schools, DC teachers worked with young people from more than one year group, although one school had selected pupils in Year 7 only. This school chose to focus on Year 7 pupils in order to help them with their transition to secondary school. The DC teacher was a qualified primary teacher and it was felt that this helped smooth the transition for participating young people.
Main findings

Young people in most of the case-study schools attended DC sessions for one term. Four DC groups had a maximum of 15 young people. The other school offered DC to about 20 young people at a time, although this group was then divided into three smaller groups, with one adult working with each group.

Details of the numbers of young people involved in the five schools are provided in Appendix 1.

3.1.4 Double Club classroom lessons

In each of the schools we visited, classroom sessions were delivered in curriculum time, in a dedicated DC classroom. Young people attended at least twice a week in small groups. The smaller class sizes were seen as having a number of benefits for the young people involved, including opportunities for:

- greater interaction between the DC teacher and the class
- opportunities for a more personalised style of teaching
- more focused attention on individual young people in the class
- pupils had access to support as and when they needed it.

*The group is small with focused attention. In a class of 20-25 it’s easy to get away without reading, but here during most lessons they are reading out loud to each other.*

[DC teacher]

*The main motivating factor for attending Double Club is that we give them a voice. We allow them to express themselves in an appropriate way, because it is normally a small group with a high staff to pupil ratio.*

[Member of the school teaching staff]

Three of the five case-study schools focused exclusively on literacy, and two included both literacy and a numeracy component. One school also ran classes on healthy living.

The case-study schools differed as to whether they chose to make DC an alternative to core subjects for pupils, or to make it an addition to teaching in these subjects. In four of the schools, DC was timetabled so that young people would not miss core subjects (English, mathematics and science) although they could miss classes in any Foundation subject. In one school, however, young people did miss core subjects in order to attend DC sessions. None of the schools offered catch-up programmes for the lessons missed. As one school teacher explained, ‘We feel the benefits of attending DC outweigh everything else.’
3.1.5 Double Club resources and worksheets

The DC classroom sessions were generally designed to engage young people in their learning through the use of colourful and topical sports-based materials which reflected the interests of many of the young people in the group. (Further information on young pupils’ views on the sports focus is presented in Section 4.3.)

DC teachers in each of the case-study schools used a mixture of Arsenal DC resources (adapted to incorporate their own club’s name, logos and players) and materials they developed themselves.

*The engagement with the football club or its community partnership is key, as through them we get access to the brand, which we can then use in the resources.*
[DC coordinator]

*The resources from [Arsenal] are brilliant and spark off other ideas. It’s about knowing your kids, and adapting the materials that way and also making sure that everything is [name of club] based.*
[DC teacher]

In one area resources were produced by a central DC coordinator and distributed to all participating schools. DC teachers in the schools we visited also shared their ideas and resources with DC teachers in other clubs via email.

3.2 The impact of Double Club: case-study evidence

This section presents evidence from the case studies (Strand 1) concerning two of the key research questions, namely:

Has DC achieved its objectives and how were these achieved? What has been the impact of DC on pupils’ motivation and self-esteem, and what were pupils’ and teachers’ perceptions of the programme?

The following Section (3.3) discusses the Strand 2 statistical findings in relation to the impact of DC on attainment.

3.2.1 Has DC achieved its objectives?

Double Club was developed to motivate and re-engage underachieving young people and to improve attainment, by harnessing young people’s interest in football. As Scott Cohen, the National Double Club coordinator, explained:

*Our aim in the classroom is to develop and increase pupils’ competency, enjoyment and confidence with words, numbers and other subject areas by using their love of playing football and interest in the game, through curriculum linked resources. On the football side, it’s to develop their football skills, fitness levels, and teamwork in a fun and safe environment.*
The case-study interviewees said that involvement in DC had been successful in achieving the aims of motivating and re-engaging underachieving young people. As well as giving their views of its perceived impact on attainment, several case-study school staff provided evidence from their own evaluations of pupils’ progress during their involvement in DC (see Section 3.2.3 below).

In each of the schools visited, members of the school leadership team were supportive of DC and the programme was well known in the school. All of the members of staff we spoke to wanted their school to continue its involvement with the programme and said that they would recommend, or already had recommended, the programme to teachers in other schools.

3.2.2 What are the benefits of participating in Double Club for young people?

The DC coordinators, members of school teaching staff and pupils we interviewed all spoke very highly of the DC programme and provided many examples of the positive impact of the programme on young people’s attainment, self-esteem and motivation. A summary of the main things which the pupils enjoyed about DC, obtained by means of the audience response survey, is provided in the box below.

**Findings from the Audience Response Survey on what pupils enjoy about DC**

- To find out what young people enjoyed about going to Double Club, we provided a list of six options and invited young people to select all the options that were true for them.
- The majority of young people (39 out of 51) said that they enjoyed going to Double Club to improve their learning. The same proportion (39) enjoyed playing sport.
- Two-thirds of the young people enjoyed visiting the stadium (34).
- Over half of the young people enjoyed the prizes (29) and a similar proportion (27) said that they enjoyed going to Double Club to improve their confidence.
- When asked the one thing they enjoyed most about going to DC, the most common response was improving my learning (22).
### 3.2.3 How was young people's progress measured?

Each of the five case-study schools tracked the progress made by young people involved in the DC programme. Progress was tracked through setting personal targets and assessment results (adapted KS2 papers).

#### Setting personal targets

Staff in three of the five case-study schools reported that they had set personal targets with their pupils. In these schools, young people were asked to set targets for themselves for literacy, numeracy and sport, during their first week of attendance. Some examples of targets included: ‘to improve my spelling skills’, ‘to have more confidence with speaking tasks’, ‘to work better with a partner or in a group’ and ‘to pass the ball more accurately’. Each young person set between one and four targets that they would work towards during the course of the next few weeks. Pupils kept records of their targets in their DC file. The DC teacher also kept a copy to refer to and discuss with the young people during and at the end of the programme.

#### Adapted KS2 papers

The Qualifications and Curriculum Authority (QCA) gave permission for the DC programme to adapt and bring together different questions from past KS2 National Curriculum Assessment papers and put them into a sporting context. The same marking scheme was used as for the original papers, enabling DC teachers to obtain a ‘fairly crude national curriculum level’ for participating young people. In each of the five schools young people were tested at the beginning of the programme and again at the end of their involvement.

One of the case-study DCs had also undertaken their own analysis of National Curriculum results, which entailed comparing the changes in levels from KS2 to KS3 for DC pupils with a group of other (non-DC) young people in the school.

In each of the five schools, DC teachers said young people’s performance levels in English had improved after participating in the programme. Three of the five schools shared self-evaluation data from their adapted KS2 National Curriculum assessments with the research team (see Table 1). The small numbers of pupils in these local evaluations reflects the numbers of young people attending DC in 2007/08. Findings from the self-evaluation data suggest that the majority of young pupils in the three schools made progress during their involvement with DC (see Table 1). Most pupils had improved by at least one level in English and some had improved by two levels.
Main findings

Table 1  Schools’ self-evaluations of progress made by young people in English after one term of Double Club

<table>
<thead>
<tr>
<th>Year group</th>
<th>Up 2 levels</th>
<th>Up 1 level</th>
<th>Up sub-level(s)</th>
<th>No change</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>School 2</td>
<td>7</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>School 3</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

One case-study school also provided their analysis of their KS3 mathematics results. This data showed that most young people (eight out of 13) had progressed at least one level, three young people had progressed two levels and one young person’s results had gone up three levels. Data collected by this school from a comparison group of pupils with similar characteristics, showed that a higher proportion of DC pupils had improved by at least one level at KS3 in English and mathematics, compared to pupils who had not participated in the DC programme.

In one area, where young people attended DC for a whole school year, the DC Coordinator assessed pupils’ English performance each term. The test results showed that the biggest improvement in attainment took place at the end of the first term. After that, attainment levels appeared to reach a plateau. The DC teacher felt that the fact that young people maintained the same grade was a positive outcome as it demonstrated security in the grading band. However, she agreed with the school that the following year they would change the length of time young people spent in DC from a year to a term.

I think… it’s the first term that is the initial boost. That’s the wow factor and the ‘this is new, this is my intervention and this is me trying’. They’ve then got that basis to progress. It made me think, let’s do it for one term with the kids, instead.

[DC teacher]

In four of the five case-study schools, the young people we interviewed reported that they felt that being involved with DC had improved their reading and writing.

It’s helped me catch up with my English lessons, because when I was excluded I missed a year.

[Year 8 pupil]
You remember the little hints, they stick in your head. Sometimes [name of DC teacher] like dragged on but it was good because he got all them little hints in your head.
[Year 8 pupil]

In the remaining case-study school, the purpose of attending DC (to improve literacy and numeracy) was not made explicit to participating young people and as a result they perceived the benefits and impact of the programme differently to the other young people we interviewed. The young people in this case-study school did not report any progress in their literacy or numeracy skills or feel that their confidence in these areas had improved. While they enjoyed going to DC, they often described the main benefit to them as the opportunity to miss lessons and to do extra sport.

It’s good because you get out of lessons. If they said ‘You are going to do literacy and numeracy’, then I probably wouldn't have gone. We haven't done none of that… It’s about the sport, I want to be a PE teacher at primary school.
[Year 7 pupil]

In this school, five out of nine young people responding to the audience response survey said that the best thing about being able to do sport at DC was missing lessons, which was not an answer mentioned by young people attending other DCs. Only one young person in this school said that the thing they enjoyed the most about DC was improving their learning, which was the most popular answer among young people in other DCs.

Findings from the Audience Response Survey on pupils’ attainment

- In order to find out young people’s views on how Double Club had helped them with their schoolwork, we offered a list of four options and asked the young people to select all that were true for them.
- The majority of the young people said that Double Club had helped improve their writing (41 out of 51) and reading (34).
- Under half of the young people (22) felt that Double Club had helped improve their computer skills.
- In the two schools that focused on mathematics as well as English, the majority felt that it had helped them to improve their maths (16 out of 22).

3.2.4 Impact of Double Club on young people’s self-confidence, motivation and self-esteem

DC teachers and members of the school teaching staff felt that the DC programme had had a positive impact on young people’s self-confidence, motivation and self-esteem. One aspect of confidence mentioned by several interviewees, was young people’s willingness to answer questions in class.
You see the pupils who come in and aren’t very confident. They did a questionnaire at the end of Double Club and they said that they didn’t want to put their hand up in lessons, but after Double Club they feel more confident and better in their lessons they go to. The feedback from teachers has been brilliant, they say the pupils have become more confident around the school and seem happier.

[DC teacher]

When teachers ask questions in your lessons, some people get scared. But now [name of DC teacher] has shown us – don’t be scared; speak, it isn’t exactly going to kill you!

[Year 8 pupil]

Findings from the Audience Response Survey on self-confidence and motivation

- To find out young people’s views on the different ways in which Double Club had helped them, we gave pupils a list of five options and asked them to select any that were true for them.
- Over half of young people felt that Double Club had helped them be a more confident person (32 out of 51), enjoy school more (31) and learn not to give up (28).
- Just under half the young people (23) agreed that Double Club had helped them be more interested in their lessons and a similar proportion (21) felt that Double Club had helped them to get on better with other teachers in their school.

The audience response survey results suggested that most young people felt that DC contributed to their self-confidence, enjoyment of school and persistence, but they were less sure about its impact on other lessons or on their relationships with other teachers.

3.2.5 Impact of Double Club on young people’s attendance

As well as improvements in attainment, motivation and self-esteem, teachers in all five schools felt that the DC programme had helped improve the attendance of many of the young people involved. One school provided evidence to support this. In this school, seven out of 13 pupils had achieved 100 per cent school attendance by the end of the programme, with the biggest increase for one young person being from 84 per cent in the previous term to 100 per cent attendance during the term s/he took part in the programme. Both staff and young people from all DCs recognised the impact on attendance. One teacher summarised the importance of improving attendance as follows:
I think it has given some of our more difficult pupils one of the only reasons why they will come to school a lot of the time... Over the years with Double Club, we have dealt with a lot of pupils who are at risk of exclusion. For a very hardcore group of kids, you have given them a reason for wanting to come to school, and given them an environment where they can achieve and feel that they are actually gaining something. That has a knock on effect because you know if they are here they’re going to be going to other lessons as well through the day.

[Member of teaching staff]

3.2.6 Impact of Double Club on schools

In addition to having a positive impact on young people attending DC, school and Centre staff reported that DC has had wider benefits on the school community, including:

- the opportunity for more disruptive pupils to be taken out of lessons, thereby enabling teachers to focus on teaching other young people in the class
- opportunities to provide a broader curriculum for young people and to address different learning styles and needs
- the promotion of social inclusion through early intervention and the raising of young people’s aspirations
- greater links with, and improved rapport between, young people from other schools involved in the programme in the local area
- ‘spin-offs’ that improved links with the sports clubs bring for other young people in the schools (e.g. opportunities to attend events at the club).

3.3 The impact of Double Club: evidence on pupil attainment using the national pupil database

In this section of the report we provide an overview of the findings from Strand 2 of the study. While Strand 1 has examined the pupils’ views on confidence and motivation, the focus on Strand 2 has been on the attainment of DC participants. Strand 2 provides a broad indication of pupil progress some time after they attended DC.

For Strand 2 of the analysis, we identified young people who had attended DC in the National Pupil Database, so that their progress in English and mathematics could be compared to the progress of similar young people who had not attended a DC. This enabled the research to control for background characteristics which can affect attainment, such as gender and prior attainment. In other words, we attempted to filter out some of the other variables that can influence attainment, in order to identify if there was any evidence of a ‘DC’ effect. (Full details of the statistical analyses can be found in Appendices 2 and 3.)
Controlling as far as possible for differences between pupils who had attended DC and those who had not, the analysis found that pupils who had attended DC had achieved on average 0.28 of a KS3 level lower in English than those who had not attended DC (see Table A3.1 in Appendix 3). In mathematics, pupils who had attended DC achieved on average 0.32 of a KS3 level lower than the comparison group who had not (see Table A3.4).

We also looked at the interaction between attending DC and prior attainment at KS2, because the previous evaluation of Playing for Success (Sharp et al., 2007) had examined this and had produced interesting findings. In the previous study, the models showed variable performance of PfS pupils overall. However one finding was consistent across almost all models: there was differential performance within the group of PfS pupils, such that pupils with low attainment who attended PfS made greater progress than those with similar low attainment in the comparison group. (Sharp et al., 2007, p.17).

We found some evidence of a similar trend, though less pronounced, in this evaluation: KS2 attainment was related to outcomes for pupils attending DC in both English and mathematics. Pupils who were very low achievers (defined as being at Level 2 and below) and attended DC performed slightly better on average in English than very low achieving pupils who did not attend DC, although the effect is so small that it is unlikely to be of statistical significance (see Figure 3.1 below). In mathematics this ‘cross-over’ effect was not observed and, controlling for background factors, attainment for DC pupils remained at or below that of comparison pupils across the KS2 ability range (see Figure A3.6).

It is also worth noting that the interaction of ‘girls and DC’ was included in the statistical models but there was no significant association with this in either the main English or mathematics models. In other words, no significant differences were found in the attainment of girls and boys attending DC in these subjects at KS3.

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8 Low attainment was defined in terms of pupils being below their expected level at KS2.
9 The finding that PfS appeared to be successful for lower attaining pupils prompted the recommendation that some PfS Centres may wish to review their selection criteria, in order to further ensure that they matched the PfS offer to those pupils who could most benefit from it. (Sharp et al., 2007, p.66, Recommendation 2).
10 This finding was not tested for statistical significance. It would not have been possible to run separate models to test the potential effect of DC on pupils with specific prior attainment scores due to the small number of pupils involved. For English, there were 73 pupils classified as ‘level 2/below level of test/no test level awarded’ and for mathematics, the equivalent number was 56.
More specific aspects of attending DC, such as the number of hours attending classroom and/or coaching sessions, were similarly related to pupils having lower achievement. Attending DC classroom sessions was related to pupils achieving on average 0.01 of a KS3 level lower in English, and 0.02 of a KS3 level lower in mathematics, per standard deviation increase in the number of hours spent in classroom sessions. Pupils who attended DC coaching sessions achieved on average 0.01 of a KS3 level lower in English, and 0.02 of a KS3 level lower in mathematics, per standard deviation increase in the number of hours spent in coaching sessions. The timing of participation in DC (for instance whether pupils had attended DC one term ago, or three years ago) had no discernable impact on pupil attainment in either English or mathematics. This is in line with earlier findings from evaluations of Playing for Success (Sharp et al., 2004, Sharp et al., 2007). (Further information about these findings is presented in Appendix C.)

### 3.4 Overview on impact

Strands 1 and 2 of the evaluation produced apparently contradictory findings. The findings from the qualitative strand of the work, based upon the case studies, were positive about the impact of DC. The main benefits of participating in DC as reported by school and Centre staff were:

- improved attendance for many of the young people involved in DC
- young people improved their motivation and self-esteem
Main findings

- improved self-evaluation test results
- benefits to the wider school community.

Strand 2 of the research, using statistical modelling conducted on national KS3 data, found negative associations between pupils attending DC and progress in English and mathematics.

There are several possible reasons for the differences between the outcomes from the two strands. First, the samples were different. Strand 1 comprised five schools and 51 young people, most of whom were in Years 7 and 8. Strand 2 focused on 448 pupils from 15 DC Centres, most of whom were in Year 9 when they attended DC.

Second, Strand 2 focused on attainment data, while Strand 1 examined a broader range of outcomes. Although Strand 1 collected the results of locally administered tests, differences in results may be partly be explained by the small-scale nature of the local assessment results reported in Strand 1, especially as these did not control for differences in background pupil characteristics or use a comparison group. Third, the two Strands reported results from different outcome measures, collected at different intervals – most of the tests administered by the schools in Strand 1 were KS2 National Curriculum Levels, whereas Strand 2 used KS3 point scores. The assessment results reported in Strand 1 were collected while pupils were still attending DC, whereas results used in Strand 2 took place some time after pupils had taken part. Fourth, the period covered by the two strands differed: Strand 1 included information collected in 2008/9, whereas Stand 2 collected data from pupils who attended DC from 2005 to 2008. It therefore included results from DC Centres at an earlier stage of development.

Clearly both strands have different strengths and weaknesses. Strand 1 reports largely positive perceptions of participants, which may have been influenced both by their partial selection as ‘good practice’ examples and their wish to reflect positively on the experience of taking part. Strand 2 found a negative association between being involved in DC and progress from KS2 to KS3. However, we need to make an important qualification here. Rather than involvement in DC actually being associated with ‘negative’ progress, we consider it to be more likely that these associations are indications of the inadequacy of our statistical models in terms of capturing the differences between those pupils selected for DC and those in the comparison group (e.g. in terms of their characteristics and level of need), because we think it highly unlikely that DC was responsible for pupils’ comparative lack of progress.

No statistical model can capture all the complexities of educational experiences and backgrounds. It needs to be borne in mind that there may have been differences between the DC and comparison groups of pupils that were not captured by the models, and which could have contributed to the differences in outcomes. The results of evaluations such as this are therefore indicative only: they should not be interpreted to mean that the programme being evaluated definitely caused any observed differences in results. Therefore, there are clearly some important considerations to bear in mind when interpreting the apparent contradictions in results from the study as a whole.
4. Positive features of the programme

An important question for policy makers and practitioners concerns ‘what works?’ in DC provision. This is a difficult question in the context of the mixed findings reported in the previous chapter. But, having said this, certain features of DC provision were identified, especially in the qualitative strand of the evaluation, as contributing to positive impacts for pupils and other stakeholders. These features, as identified by pupils and DC staff, can be summarised as follows:

- the appeal of the programme to young people
- the pupil selection process
- learning content, style and the DC environment
- engagement using the medium of sport.

4.1 Programme appeal

The DC programme appealed to schools because it offered a means of raising standards and helping individual young people. The programme was viewed as both well-considered and adaptable because it could be tailored to meet the needs of particular schools.

The programme also held a strong appeal for young people. Most of the pupils required help with basic skills, but also needed an alternative to normal classroom lessons. In the words of one Year 7 pupil, the experience of attending DC was ‘working fun’. The sports connection was also appealing and motivational to many of the pupils, as demonstrated in the results from the audience response survey.
Positive features of the programme

Findings from the Audience Response Survey on motivation for attending DC:

- To find out why young people had decided to go to Double Club, we asked pupils to select (from a list of five reasons) all that were true for them.
- Over half of the young people (29 out of 51) said they had decided to go because a teacher had suggested it to them.
- Around half (26) said they had decided to go because they thought it would help with their literacy/numeracy.
- 20 decided to go because they wanted to play football/sport.
- 18 had gone to Double Club because their friends were going as well.
- 16 had decided to go because they liked the football/sports club associated with Double Club.
- We asked young people if they would have still wanted to go to Double Club if it had not been about football/sports.
- 32 out of 51 young people said they would still have wanted to go.
- 10 young people said they would not have wanted to go.
- 8 young people were unsure.

The findings collected from the case-study visits showed that it was important to explain the programme to young people and to help them to view it as a positive opportunity – a prestigious programme that it was a privilege to attend. As one DC Coordinator explained:

_The way they are engaged in the programme, it’s not done as often is the case and young people see themselves as ‘I’m on this programme because I’m thick’. It’s actually: ‘Congratulations you are on the programme because you have the ability to do well. We think you will enjoy this and it will help you.’ The way it’s presented makes a significant difference to the way they perceive the programme and to their self-confidence._

4.2 Pupil selection

Several interviewees highlighted the importance of selecting pupils who would benefit from taking part in DC. The selection process appeared to work well where DC teachers had drawn on a number of different sources of information, including assessment and attendance data, as well as the views of staff in the school who knew the young people well.
As noted in Chapter 3, there may be a possible weakness in the statistical modelling (in Strand 2) in that it may not have been able to identify all the relevant characteristics of young people who could or would benefit from DC. For example, staff at one school suggested that young people who were gifted and talented at sport could benefit particularly from involvement in DC. Overall, DC teachers and members of school staff told us that the young people who benefited most from participating in DC:

- had an interest in football (though were not necessarily good football players)
- had levels of literacy and numeracy below the level expected for their age, or
- were coasting – ‘the ones who potentially could do really well but need that intervention to give them a boost’
- lacked self-confidence
- had poor attendance.

One DC coordinator explained:

*Our advice would be they [DC coordinators] target particular kids who need a bit of a boost. Their attendance might be starting to be a bit wobbly and they might be becoming disengaged. It’s the ‘four Ds’ really: demotivated, disengaged, disappearing and eventually departing – if we don’t do something about it.*

The personalities of the young people involved and the group dynamics were also important factors to be considered, as one DC teacher explained:

*You want [only] two pupils with behaviour problems in a group at the most, as it would upset the dynamic if there was more than that. Someone who would benefit the most would be someone with low levels of literacy, but not SEN… They have to have an interest in football even if they aren’t good at playing it. A lot of the boys aren’t good at football, although some in the group are. A lot of the boys don’t have hobbies, don’t have friendships and they benefit in particular from the sense of team work and working together.*

The importance of ‘feeling special’ was reinforced by another DC teacher, who said:

*There’s a lot of students who do come in who are quite difficult, who at the end I think go out a lot happier and I think feel quite special because they’re doing it and they’ve been chosen from everybody else to do it. It’s sort of a privilege to do, I think.*

One statistical finding also provided a hint that a particular kind of pupil, someone who could perhaps be described as an ‘entrenched low attainer’ might benefit the most from DC provision (See Figure A3.3).
4.3 Learning content, style and environment

The programme content, pedagogical style and the learning environment were all fundamental to DC having a positive impact. Teaching quality was of fundamental importance.

School staff commented on the importance of the interpersonal skills of the DC teachers: they were able to build a good rapport with the young people in their class and create an atmosphere that was more relaxed than other lessons in school. They also worked hard to encourage a ‘team’ identity and to help young people feel proud of their involvement in DC. This was considered especially important in encouraging young people’s positive self-esteem.

The identification with football and the link with a local football club was a key feature which was particularly appreciated by some of the young people, as illustrated by the following comment:

“We like football and everything, and if we like football we want to learn about and we want to write about football. It’s every little boy’s dream to play for their team, isn’t it? So it’s like doing it for our local club and we really want to get stuck in.”

[Year 7 pupil]

Likewise, teachers delivering the programme described sport as ‘a massive hook’ for young people: sport ‘breaks down a barrier to learning straight away’. It was also seen as a way of enabling young people to ‘access information on literacy and numeracy which they wouldn’t normally engage with.’ One DC teacher explained:

“Some teachers have said that the lads won’t do any writing in their lessons. In my lessons, seeing a picture of a footballer and asking them to write about a goal has got them writing and talking about their work. Just because it’s football it gets them started. In a normal lesson they won’t do it as they think: ‘It’s English and I’ll have to do writing’.

The young people we spoke to also said how much they enjoyed using the resources and worksheets.

“The English sheets were fun because they talk about Arsenal football players and how to spell their names, and team work.”

[Year 7 pupil]

The high quality of the resources used in the DC sessions was commented on by members of the teaching staff in all of the case-study schools.

“They are of a quality we couldn’t begin to produce ourselves. They are in colour; they are all bang up-to-date.”

[Member of teaching staff]

Having an attractive learning environment also made a big difference to young people. The classrooms were decorated with club posters, up-to-date pictures of footballers and examples of young people’s work. The young people told us it marked the lessons as something different and made them feel special.
Positive features of the programme

There are posters of players and it looks really bright. The atmosphere is excellent, exciting and original.
[Year 9 pupil]

The audience response survey contained several questions for young people about their work in the DC environment. Their responses indicated that the work was interesting, pitched at the right level and that they worked hard.

Findings from the Audience Response Survey on the work in Double Club

- We asked young people whether or not they agreed with a series of statements about Double Club Lessons.
- Most of the young people (46 out of 51) agreed that the work at Double Club was more interesting than most school lessons.
- Most young people agreed (42 out of 51) that the work at Double Club was easier to understand than work in other lessons. A similar proportion (41 out of 51) agreed that the teachers explained things more clearly at Double Club.
- Most young people (37 out of 51) said that they worked harder at Double Club.

4.4 The impact of the sports sessions

The opportunity to play sport and develop sports skills made a specific contribution, especially in helping to develop a sense of team work amongst the young people participating in DC, enable them to make friends and gel as a group.

They have their own shirts for when they play football provided by [name of football club]. It gives them an identity and a sense of belonging.
[DC teacher]

A learning mentor spoke of the impact the opportunity to play football had had on one of the young people with whom she worked:

He’s not brilliant at football, he does struggle, but the others haven’t laughed at him – they’ve joined in and passed the ball to him. It has done him good and built his confidence up as the others involve him. It’s working with others, the team work, that has helped him most.

Other benefits included enjoyment, developing a good level of fitness and the opportunity to receive expert coaching.
As mentioned previously, some young people emphasised that they were motivated to be involved in DC because of the opportunity to play sport; but not all young people were equally motivated by this aspect of the programme. For some, the sports theme of the classroom sessions was an attraction even though there was no great interest in playing the sport itself. Views were mixed as to whether DC was as effective for young people who were interested in football, but not interested in playing it. One DC teacher explained his approach to this as follows:

*I have a few kids who just want to do English and not football and I say it isn’t a problem. I just let them do the English and then they can go to their normal lesson.*

We also found that not all young people would have been put off participating in DC if they hadn’t had the opportunity to play sport.

*I would still have enjoyed it because at least you are talking about football and you can learn more about the team.*

[Year 7 student]

We asked all young people about the importance of the opportunity to play sport by means of the audience response survey.

### Findings from the Audience Response Survey on the importance of playing sport

- Young people were invited to select from a list of options, how they would have felt if they hadn’t had the chance to play sport as part of DC.
- The most common single response was *it wouldn’t have mattered to me* (selected by 23 out of the 51 young people).
- 13 young people said *they wouldn’t have wanted to go.* 13 young people said they would have been *unhappy.*
- Only two young people said they would have been *happy* if they had not been able to play sport at DC.
These responses indicate a divergence of views, though it is clear that the opportunity to play sport was an important aspect of ‘added value’ for many young people (26 out of 51 said the absence of sport would make them unhappy or that they would not have wanted to attend).

Four of the case-study DCs were linked to football clubs and one was associated with another sport. In this case, the teacher felt that the ethos of the sport could help to encourage good behaviour amongst young people. He also acknowledged, however, that other sports may not be as popular as football and, as a result, the coaching sessions focused on a range of sports:

*We try a range of sports to increase participation for everyone. They know that they might not like this week’s sport, but next week we’ll do something that they like.*

The majority of young people (39 out of 51) said they enjoyed playing sports in DC regardless of whether the sport was football.

The importance of sequencing the sessions, so that the coaching immediately followed the classroom sessions was stressed by most DC teachers. DC teachers felt that having the coaching sessions follow immediately helped young people’s concentration in the first lesson and provided young people with ‘an instant reward’:

*It’s a carrot for the kids to get their work done in the classroom. It’s there as an incentive... they know they can’t mess around in English or they will miss the football.*

[DC teacher]

Members of teaching staff in two case-study areas highlighted their concern that offering sports sessions after school could have negative consequences for DC. As one teacher said:

*It would negate the whole thing. It’s the balance that works so well. Some schools might run the football sessions after school, not [in] school time, as there is a perception amongst staff that they shouldn’t be playing football, when they should be in their lessons. It has to be how it is, as it works!*

Timetabling difficulties in some schools meant that it was not always possible to have the coaching sessions taking place immediately after the sports element. In one case-study school, football sessions were scheduled after school. This was a response to reluctance amongst school staff to allow young people to miss more than two of their ‘normal’ lessons a week.

Attendance at these after-school coaching sessions was relatively low, with only around half of the young people attending each week. The DC teacher in this school explained that the main reasons young people did not attend the sessions were that some had to attend mosque after school, and also that some had difficulties being collected from an after-school session. The DC teacher thought that the opportunity to play the sport was more of an ‘initial hook’ and that the young people ‘love the classes just as much’. This point was supported by the young people themselves who told us they were more interested in the DC lessons than the opportunity to play sport, and so did not feel that they were missing out if they did not attend the coaching sessions.
To summarise, teachers and DC staff were asked to identify the most successful elements of the programme and they identified the following features as important to its success: (1) provide a programme that is appealing both to schools and to underachieving young people; (2) selecting young people for the programme is of crucial importance, especially in terms of ensuring that those with the potential to benefit are selected; (3) once young people become involved, the programme needs to be sufficiently engaging and supportive of learning to enable them to maintain their motivation and the promotion of their learning; (4) the opportunity to play sport contributes to the appeal of the programme, and makes a distinctive contribution to its impact.
Section 3.1 of this report sets out the characteristics of four different ‘models’ of DC programme delivery. One aim of the research was to find out whether there were particular strengths and weaknesses associated with different DC models. To investigate this, in Strand 2 we compared KS3 data across the four different DC models, to see whether different models were associated with different KS3 attainment. We used chi-squared tests, controlling for background factors, for this purpose. The findings suggest that none of the models of DC delivery were associated with progress in English. There did appear to be a link between the models and the strength of the negative association with mathematics attainment; nevertheless, we should point out that all models were associated with negative attainment. For the same reasons that we cannot conclude that DC is detrimental to pupils’ progress, we should not read too much into this result.

The Strand 2 finding that there were no meaningful differences between different DC models in terms of positive pupil progress was supported by viewpoints collected in the Strand 1 case studies: DC coordinators and teachers, members of the wider school teaching staff and young people all felt that their particular model worked well. When asked what improvements could be made to the DC programme, all interviewees felt the programme worked well in its current format.

There were, however, strong views on both sides about the value of having DC staff based on-site. DC teachers who are based in the school feel that the main benefit to this is that they see the young people they work with around the school on a daily basis and get to know them well.

*A lot of the time it takes a while for the kids to trust you, because teachers change all the time and if they see someone constant they feel more comfortable.*

[DC teacher]

Having a DC teacher based in the school was also felt to provide them with a good understanding of the school environment:

*Anyone who has ever worked in a school knows what a strange place it can be from the outside. Every school works differently. Being based in the school, he knows the right people to speak to and he knows the rules in the school which helps because obviously we have to be consistent with things like behaviour.*

[Member of the school teaching staff]

On the other hand, interviewees from case studies where DC teachers are based outside the school also felt that there were benefits to this approach, as illustrated by the following comment.

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11 The results of the chi-squared test were 6.72 (4 df, p = 0.15, NS) for English and 13.1 (4 df, p<0.05) for mathematics.
It is someone new that the students don’t know. I think the fact that [the DC teacher] is in a branded tracksuit, and is not always here in school, makes the students see him as a specialist DC teacher so there has been a bonus there. Students aren’t dealing with the same member of staff day in, day out.

[Member of the school teaching staff]

A member of the school teaching staff in another area, where a DC teacher comes in to school to deliver the sessions, agreed:

The pupils see it as something new, something fresh, and something different as opposed to: ‘Oh, it’s one of my teachers doing this’.

Irrespective of where the DC teacher is based, there was agreement amongst our interviewees that the skills of the teacher were paramount.

It was considered important to have teachers delivering DC sessions that young people can relate to – possible role models who had good relationships with their pupils in their previous teaching jobs. In three of the case-study clubs, both classroom and football sessions were delivered by a qualified P.E. teacher. Members of the school teaching staff in these areas felt that this worked well, as one interviewee explained:

The kids seem to engage well with the [DC teacher] …he’s a very good footballer and has the skills. The kids see him as a role model.

A member of the school teaching staff in another area agreed:

I think it good for boys to have a good role model; somebody promoting reading and writing, a P.E. teacher who is a little bit cooler than a middle-aged, female English teacher!

In another school, the classroom sessions were delivered by a qualified primary teacher. School staff did not consider the teacher’s lack of secondary teaching experience to be an issue. Young people told us they enjoyed her dynamic style of teaching and also liked the fact that football sessions were delivered by a coach from the local football club.

We enjoy it because coaches from [name of football club] come just to teach you. This is way better than someone else teaching us, isn’t it? They wouldn’t know any skills!

[Year 7 pupil]

In summary, there was no evidence from this evaluation that any particular model of DC delivery has a significant association with positive pupil outcomes. There was some difference of views among respondents about whether or not it was better to have the DC teacher based within the school or as a visitor from outside the school, but there were clearly pros and cons to both approaches. Interviewees suggested that in addition to good subject knowledge, the interpersonal skills of the teachers, and their ability to engage the pupils, were more important than whether they came from within or outside the DC school.
6. Conclusions and recommendations

This study set out to evaluate the process and outcomes of the DC initiative. The evaluation consisted of two complementary methodological strands, one qualitative and one quantitative. Evidence from Strand 1, based on five qualitative case studies of DC Centres (four of which were selected to represent good practice), suggests that DC was achieving its core objectives. It was having a positive impact on pupils’ motivation and self-esteem, with young people reporting that they worked hard in DC sessions and that they felt more confident and able to contribute in their other lessons. Pupils and teachers had very positive perceptions of the programme: they saw it as an opportunity for lower-attaining young people to obtain additional support with their learning. The programme was viewed as being engaging, motivating, well planned and with the appropriate levels of adaptability and flexibility.

The statistical analyses in Strand 2 of the evaluation matched DC pupils’ KS3 attainment with that of similar pupils not taking part in DC. It should be noted that, although this was a robust statistical analysis, the pupil sample (of 448 individuals), was smaller than it will be in subsequent years of the DC programme, and this may have made it more difficult to detect an impact. These analyses did not identify any statistically significant positive outcomes in DC pupils’ attainment (though there was a small positive impact on the lowest attaining group of pupils), and, in some cases found negative associations. It should be stressed, however, that these are not cause and effect analyses and, due to the complexities and limitations of the statistical modelling, no firm conclusions should be drawn about the impact of DC in terms of promoting higher levels of attainment in English and mathematics.

The evaluation evidence from both strands suggests that it is not, at this stage, possible to identify a single ‘good practice’ model of programme delivery. Rather, customisation of the model to fit the school and centre context is important. The evidence on the organisation and delivery of DC suggests that different models have been adopted in response to the needs of particular DC Centres and schools. All interviewees held positive views about the effectiveness of their own model, and they appreciated the flexibility of DC in its ability to respond to local needs.

The features of the programme identified as important in providing a positive learning environment are similar to those in previous studies of Playing for Success. These include:

- the programme’s appeal to schools and young people
- the pupil selection process
- learning content, style and the DC environment
- the added value of the sports coaching sessions.

12 Pupils in the comparison group may not have the same level of need as those in the DC sample, and the statistical models may not have been able to capture this.
Conclusions and recommendations

However Sharp et al. (2007) found that Centres which were more successful in promoting longer-term impact on pupil attainment (defined as those which had at least two cohorts of pupils achieving significantly better results than the average for participating Centres) had paid particular attention to liaising with schools and helping pupils to transfer their learning to the school context. On the basis of the findings from this study, the NFER team has put together a number of recommendations for consideration by the DCSF, centres and schools and others involved in supporting and delivering the DC initiative. These are summarised below.

**Recommendation 1:** The evaluation team concludes that, overall, the DC is a positive programme because, to date, it has been successful in achieving the majority of its aims, and therefore, the research team would recommend continued funding for the initiative. The case-study research, which was based on data collected from the more ‘typical’ DC year groups of 7 and 8, produced positive findings, especially in relation to the attendance, motivation and engagement of DC learners. Although the statistical analyses produced some negative findings, it should be stressed that these are not causal findings and that there are several factors which could explain these associations including some of which are not related to DC provision. In particular, the analysis was based on pupils in older less ‘typical’ DC cohorts, and included results from DC Centres at an earlier stage of development.

**Recommendation 2:** Although there was no evidence of a single model of good practice of DC delivery, there were some features of delivery that were identified by case-study participants as being successful. We therefore recommend raising awareness of these features (the most important of which are identified in Recommendations 3–5 below).

**Recommendation 3:** The selection of pupils for the DCs is crucial, and clearly most centres are putting a good deal of thought into the process. It would be useful to document these approaches to help current and new DC Centres with their selection process, in order to target the initiative on young people who are likely to benefit most from DC.

**Recommendation 4:** The DC programmes currently have a high level of appeal to young people – this needs to be maintained. At the same time, further information should be collected on the reasons why there may be a lack of appeal to a minority of young people and to identify which other elements of DC might appeal to non-sports lovers. Two key features of DC that promote success are the programme’s appeal to schools and young people, and engagement using the medium of sport. Part of the appeal has been based on the popularity of professional sport (and sportsmen and women), and there may be ways in which the charismatic, role model and leadership aspects of the programme experience could be further enhanced or promoted. This could be done by ensuring that all centres are delivering these aspects of the programme and by ensuring that these aspects are promoted to young people.

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13 Specific strategies included: school staff recognising pupils’ achievements, providing similar learning conditions and resources, encouraging young people to use their new skills and providing opportunities for independent learning once they had returned to school.
Conclusions and recommendations

**Recommendation 5:** The content, style and environment of DC programmes were viewed positively by young people, as well as by DC and school staff. This suggests that the curriculum and materials on offer, the teaching styles being used and the DC surroundings are popular. Further developments in DC provision should build upon these features. In addition, we recommend ensuring that all participating pupils are made aware that the programme is designed to help them with their learning, rather than just being an enjoyable experience (it is important to do this because pupils need to identify what they have learned). We also recommend that DC staff work with school staff to ensure that pupils are helped to transfer their learning and maintain their progress in the longer term.

**Recommendation 6:** case study participants held differing views on the optimum length of a DC programme for pupils, although most ran a one-term programme. Some participants favoured a single term programme, because the first term seemed to have the most impact, but on the other hand a one-year programme may be logistically easier to deliver. We therefore recommend further investigation and discussions of this timescale issue, involving DC staff and schools.

**Recommendation 7:** The results from analysis of key stage 3 data (Strand 2 of the research) flag up the need for continued and detailed scrutiny of the impact of DC on pupil attainment. Currently, adapted Key Stage 2 tests are used to monitor pupil progress in some DCs, but the use of these tests is not standardised across all DCs. Further impact evaluation would be aided by the collection of additional and consistent attainment data across the DC Centres (e.g. using the same adapted Key Stage 2 tests across all DCs), so it would be worth considering how this might best be done in the future. We recommend that DC teachers are encouraged to keep records of which pupils have attended and that this information is recorded in a standard format, in order to aid future identification and analysis of the impact of DC on attainment.

**Recommendation 8:** In some ways the DC is still a relatively new initiative, and it may take more time to become embedded. In order to give a more definitive answer to the question of the effectiveness of DC, we recommend that the DCSF considers funding a randomised controlled trial in around two years’ time (i.e. in the academic year 2011/12). This study would have the advantage of having a larger DC pupil population to work with, and an experimental approach would allow for conclusive causal findings to be drawn.
References


Appendix 1  Information about case-study schools

This appendix contains information about the sample of young people involved in Strand 1 of the evaluation.

Table A1  Sample of young people participating in DC in case-study schools

<table>
<thead>
<tr>
<th>School</th>
<th>Number of young people participating in DC in 2007/08</th>
<th>Year group</th>
<th>Length of involvement in DC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>School 1</td>
<td>104 pupils</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>Four cohorts of young people per term.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum of 15 young people per group.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 2</td>
<td>39 pupils</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>One cohort of young people per term.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum of 15 young people per group.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 3</td>
<td>11 pupils</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One cohort of young people.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 4</td>
<td>43 pupils</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>One cohort of young people per term.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum of 15 young people per group.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 5</td>
<td>Approximately 60 pupils</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>In 2007/08, one cohort of young people per term.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In 2008/09, one cohort every eight weeks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum of 20 young people per group.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2  
Analysis of national pupil attainment data

A2.1 Sample selection
In order to maximise the number of pupils in the sample, we contacted all fifteen DCs which were operating in 2007/08, and asked them to provide us with details of all pupils who were attending DC in 2007/08, as well as details of pupils who attended DC in 2007/06 and 2005/06 (if their DC was running in those years).

We requested pupil-level details such as unique pupil number (UPN) or full name and date of birth, and school attended in order to match the pupils to the NPD. We also asked for year group, date of participation in DC, the number of hours spent in classroom sessions, and the number of hours spent in coaching sessions. Data were received from fourteen of the fifteen DCs operating at the time, relating to 1782 pupils.

Table A2.1 shows the pupil cohorts eligible for inclusion in the analysis. The highlighted cells indicate those cohorts which had end of KS3 assessment data available by 2008, and were included.

Table A2.1 Cohort of pupils completing KS3 by 2008 and included in the analysis

<table>
<thead>
<tr>
<th>Cohort A 2007/8</th>
<th>Cohort B 2006/7</th>
<th>Cohort C 2005/6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year group</td>
<td>Number of pupils</td>
<td>Year group</td>
</tr>
<tr>
<td>9</td>
<td>168</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168</td>
<td>Total</td>
</tr>
</tbody>
</table>

Within the highlighted cohorts in Table A2.1 (once duplicates and incorrectly identified pupils were removed). We found that 448 pupils had KS3 data for either English or mathematics available in 2008. These 448 pupils were featured in the statistical modelling for the DC group.

The sample included pupils from nine DCs. The other four DCs which had provided us with pupil details, had no pupils with KS3 data by 2008.

We aimed to ensure that comparisons between young people attending DC and those not attending were as robust as possible. Young people from the matched comparison group were selected from the same LAs as those who had attended DC in order to ensure that they were as similar as possible to the DC group. However, the comparison group was selected from schools that were not running a DC. This is because young people who were from a
school running DC but who did not attend DC did not meet the criteria to participate in DC, for a variety of unknown reasons (for example, due to behavioural or motivational issues) so would not be an appropriate comparison group. In addition, any school identified as participating in DC which did not provide pupil-level data for this study was excluded from analysis, to prevent the results of pupils who had participated in DC from contributing to the comparison group.

In order to ensure ‘fair’ comparisons between pupils in the DC and comparison group, we used a statistical approach called propensity scoring. Effectively, this process enabled us to remove any individuals for whom the final models could not adequately find a ‘match’ in the other group, on the basis of their particular combination of background variables. Propensity scoring resulted in 57 young people who had KS3 data being excluded from the DC group, and a larger number of young people (5,319) being excluded from the comparison group. These exclusions ensured that comparable individuals were included in the final analysis. In addition, having a comparison group that is much larger than the DC group gives rise to the possibility that extreme results are averaged out in the comparison group but have an influence in the DC group. The exclusion of individuals with characteristics that could not be ‘matched’ in the other group (i.e. individuals with extreme/unusual values for their background data), addresses this problem.

The number of young people in the comparison group was 104,397 (although not all of these had KS3 English and mathematics scores). Having a large number of pupils in the comparison group is of benefit to the study because it improves the power of the analysis. Numbers of pupils with KS3 English and KS3 mathematics data, and therefore comprising the final sample, are presented in Table A2.2 below.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>DC Group</th>
<th>Comparison Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS3 English</td>
<td>435</td>
<td>100,402</td>
</tr>
<tr>
<td>KS3 Mathematics</td>
<td>436</td>
<td>101,369</td>
</tr>
</tbody>
</table>

**A2.2 Statistical analysis**

We used a sophisticated form of statistical analysis called multilevel modelling to examine the progress of pupils attending DC. This technique takes into account how data are grouped in clusters at different hierarchical levels. Young people are grouped into schools, which are grouped into LAs. This is because, for example, there may be more in common between two young people within one school than two young people from different schools. Statistical modelling allows us to take this hierarchical structure into account. It is also the most appropriate way of exploring more complex relationships between the data, for example whether the impact of DC varies according to the number of hours spent in DC coaching sessions.
The statistical model included comprehensive background and contextual information relating to characteristics known to be related to attainment and progress in National Curriculum assessments. These were:

- pupil characteristics, such as gender, ethnicity and relative age
- whether the pupil has special educational needs
- the influence of family disadvantage (e.g. eligibility for free school meals) and of living in an area of disadvantage (linked to Census data)
- prior attainment in National Curriculum Assessments
- school characteristics (the effects of attending a particular school, including school indicators of disadvantage and attainment)
- the typical progress achieved by young people in the local authority.

Different statistical models were designed to answer five different questions, relating to research question 4 (the impact of DC on attainment) and 5 (differences in effectiveness between models):

a. Is being involved in DC associated with progress from KS2 to KS3?
b. Does the time spent in DC coaching/sports sessions improve progress from KS2 to KS3?
c. Does the time spent in DC class sessions improve progress from KS2 to KS3?
d. Does the recency of involvement in DC affect progress from KS2 to KS3?
e. Do different DC models have different effects on progress from KS2 to KS3?

It was important to create separate models for the different questions, as the questions are very similar which could lead to misleading results, due to the statistical phenomenon of multi-collinearity. Different statistical models were also designed for the two different outcome variables (namely KS3 English results, and KS3 mathematics results). Therefore, five models were created for English, and five for mathematics.

We also used a chi-squared test to look for differences between the DC models in both KS3 English attainment, and KS3 mathematics attainment.
Appendix 3  Outputs from statistical models

This appendix shows the results of the multilevel models and provides a list of the variables included.

A3.1 Interpreting charts A3.2 and A3.5

In the charts, the variables that are associated with changes in KS3 attainment (e.g. attending DC) are listed along the bottom of the plot, in an arbitrary order.

The horizontal line, labelled 0 (zero) across the middle of the plot represents DC having no impact on change in KS3 level. Symbols below the zero line represent a negative association change in KS3 level, and the lower the symbol below the line, the more negative the association. For example, attending DC has a more negative association with change in KS3 level in both English (Figure A3.2) and mathematics (Figure A3.5) than the other variables.

The NPD contains data of pupils’ outcomes at each of the Key Stages. For the KS3 outcomes, it was possible to use the fine level variables provided on the NPD. For KS2, point scores were derived from the levels. We mapped each level to a QCA point score thus:

15 = L2/below level of test/no test level awarded
21 = L3
27 = L4
33 = L5.

The resulting points score variables were used as continuous background variables in the models.
### Table A3.1  
**KS3 English results**

<table>
<thead>
<tr>
<th></th>
<th>Lower</th>
<th>Mean</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils in DC</td>
<td>-0.39751</td>
<td>-0.2813</td>
<td>-0.16509</td>
</tr>
<tr>
<td>DC by KS2 English interaction</td>
<td>-0.02509</td>
<td>-0.0175</td>
<td>-0.0099</td>
</tr>
<tr>
<td>Hours spent in classroom sessions</td>
<td>-0.02184</td>
<td>-0.01279</td>
<td>-0.00373</td>
</tr>
<tr>
<td>Hours spent in coaching/sporting sessions</td>
<td>-0.02152</td>
<td>-0.01263</td>
<td>-0.00374</td>
</tr>
<tr>
<td>Recency of attending DC</td>
<td>-0.22521</td>
<td>-0.0452</td>
<td>0.134806</td>
</tr>
</tbody>
</table>

### Figure A3.2  
**Statistical model of outcomes for KS3 English results**
2.2.4 KS3 Mathematics Results 2007/08

Table A3.4  KS3 Mathematics results

<table>
<thead>
<tr>
<th></th>
<th>Lower</th>
<th>Mean</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils in DC</td>
<td>-0.43847</td>
<td>-0.3213</td>
<td>-0.20413</td>
</tr>
<tr>
<td>DC by KS2 Maths interaction</td>
<td>-0.02247</td>
<td>-0.0148</td>
<td>-0.00714</td>
</tr>
<tr>
<td>Hours spent in DC classroom sessions</td>
<td>-0.02546</td>
<td>-0.01641</td>
<td>-0.00736</td>
</tr>
<tr>
<td>Hours spent in DC coaching/sporting sessions</td>
<td>-0.02436</td>
<td>-0.01543</td>
<td>-0.0065</td>
</tr>
<tr>
<td>Recency of attending DC</td>
<td>-0.31574</td>
<td>-0.1327</td>
<td>0.050344</td>
</tr>
</tbody>
</table>
Figure A3.5  Statistical model of outcomes for KS3 Mathematics results

Figure A3.6  Statistical model of outcomes for KS3 Mathematics results
A3.2 Variables included in the statistical model

Local authority
School
Pupil ID
KS3 English fine level
KS3 Mathematics fine level
KS2 English level
KS2 Mathematics level
Eligible for free school meals (FSM)
English as an additional language (EAL)
SEN School action/plus
SEN Statement
Missing FSM
Missing EAL
Missing SEN
Comprehensive school to 16
Comprehensive school to 18
Special school
Boys’ school
Mixed school
Headcount of total No. of pupils
% pupils eligible for free school meals
% EAL pupils (2007)
% pupils with statement of SEN
Pupil: Teacher ratio
Ethnicity -White UK
Ethnicity - White Non-UK
Ethnicity - Gypsy/Roma
Ethnicity - Mixed
Ethnicity - Asian Indian
Ethnicity - Asian Pakistani
Ethnicity - Asian Bangladeshi
Ethnicity - Asian Other
Ethnicity - Black Caribbean
Ethnicity - Black African
Ethnicity - Black Other
Ethnicity - Chinese
Appendix 3

Ethnicity - Other
Ethnicity - Refused
Ethnicity - Unknown
IDACI (Income Deprivation Affecting Children Index)
Female
Double Club model 1
Double Club model 2
Double Club model 3
Double Club model 4
Hours spent in classroom sessions
Hours spent in coaching/sporting sessions
Timing of involvement in DC (recent)
Timing of involvement in DC (not recent)
Comparison pupils
Pupils in Double club
Winter born pupil
Spring born pupil
Summer born pupil
Autumn born pupil
Double club by KS2 English
Double club by KS2 Maths
Double club by females