Evaluation of the Computers for Pupils Initiative: Final Report

Sarah Lynch

Gillian Bielby

Michelle Judkins

Peter Rudd

Tom Benton

© Becta 2010
NOT PROTECTIVELY MARKED

Contents

© Becta 2010
NOT PROTECTIVELY MARKED

Executive summary

Background

The Computers for Pupils (CfP) initiative, launched in 2006, aimed to help overcome the digital divide, which can prevent young people from disadvantaged backgrounds from enjoying the benefits of access to information and communications technology. The initiative provided funding for schools in deprived areas to invest in home access to ICT for their neediest pupils in order to:

- give eligible learners the same opportunities as their peers
- contribute to raising educational achievement
- support personalised learning
- encourage the development of ICT skills among learners and families.

In December 2006, Becta commissioned the National Foundation for Educational Research (NFER) to undertake a national evaluation of the CfP initiative. The main aim of the two-year evaluation was to assess the impact of CfP on learners and their families and to explore how schools and teachers had developed their pedagogic practices in order to support and capitalise on the new educational opportunities afforded by the technology.

About the study

The evaluation involved distinct though interrelated strands of quantitative and qualitative research:

- Questionnaire surveys of teachers in CfP schools, learners selected for CfP, and learners' parents, which were conducted twice (autumn 2007 and 2008) in order to explore changes in general access to and use of computers and ICT, and assess the impact of the CfP initiative
- In-depth case-study research across 13 schools within eight local authorities (LAs) in the spring and summer terms 2008 and again in the autumn term 2008 (including the same LAs and schools at all time points), in order to explore through detailed interviews perceptions of the implementation and impact of CfP.

Key findings in relation to the aims of CfP

- **Giving eligible learners the same learning opportunities as their peers:** The evidence from the evaluation suggests that the learners who had benefited most from CfP were those most in need; in other words, those previously without connectivity and those in the most deprived areas. The CfP initiative was praised for helping to reduce the 'digital divide', and most learners who had received a CfP device reported that it had made them feel like they had the same opportunities as their peers. There was evidence in the sample of case-study schools that groups of

© Becta 2009
NOT PROTECTIVELY MARKED

learners had been targeted in some instances, in order to cluster those benefiting within a school, which raises a question about whether they were all eligible. There was also evidence from the case studies that small numbers of parents had opted out. In addition, a question was raised across case studies about the sustainability of any reduction in the 'digital divide' once the funding for connectivity ceased.

- **Supporting personalising of and independence in learning by providing access to ICT:** Evidence from surveys of learners and parents suggests that CfP had helped learners to work at their own pace and do school work at home whenever they liked. Most learners felt they had quiet space to use their computer; most used their computer in their bedroom. There was more scope for use of learning platforms, which could further support personalised learning.
- **Encouraging the development of ICT skills among family and friends:** There was evidence that increased access to ICT provided by CfP had helped learners to develop the confidence and competence to use computers more in general, but also that learners had developed specific skills. There also was evidence of parents having developed their own computer skills and becoming more involved in their child's homework/learning. Parents who had received training were most confident at using the device for particular ICT-related tasks. However, some schools had faced challenges in engaging parents.
- **Providing conditions that contribute to raising educational achievement:** Teachers, learners and parents perceived that CfP had helped learners to do well at school and to get better grades. The evidence also indicated that there were other benefits for learners, such as improved engagement and motivation in learning, that could contribute to raising attainment in the future.
- **Changes to teaching and learning practices:** There was clear evidence that CfP had enabled teachers to set more ICT-related homework and make more course materials available for pupils to access at home. There was evidence, particularly in case-study schools, of the impact of CfP on in-class practice when devices were used in class. But, as the initiative intended, most use of CfP devices occurred at home. There was a positive relationship between teachers' receipt of training and the impact of CfP on teaching practice.

© Becta 2009
NOT PROTECTIVELY MARKED

Further discussion of findings

Implementation of CfP

Overall, respondents in LAs and schools felt that the management of CfP had been particularly challenging in the first year of the initiative. Some LAs and schools initially required clarification on the extent of flexibility allowed in terms of the selection of learners and allocation of funding. They were unsure whether they were following guidance or rules. A particular challenge was the time scale in which Year 1 funds had to be spent, given that the process of moving from the initial announcement of the programme to actually getting the devices into the hands of pupils (and into their homes) was considered complex, and required some difficult decision-making by LAs and schools. These initial challenges were perhaps to be expected, given that the initiative was centred on giving learners access to ICT in their homes rather than at school, which is likely to have been a new approach for LAs and schools.

Typically, LAs arranged briefing sessions for participating schools prior to the launch of CfP, assisted schools with guidance early on (particularly in relation to the selection of learners), and dealt with procurement. LA support for individual schools then diminished, partly because schools became more confident with CfP processes, but also because some LA contacts felt unable to sustain support for schools after procurement due to a perceived lack of funding. School staff experienced pressures on their own time, which caused challenges. For example, families usually turned to school technicians with any technical issues (sometimes even when alternative support was offered, including support from suppliers). A minority of case-study schools were able to overcome this challenge with assistance on site from organisations, such as a City Learning Centre (CLC).

LAs and school managers would have welcomed funding to support administration. Those interviewed did not report using the School Development Grant 101 for ICT management purposes to support CfP, which could be because they were not aware that they could use the funds for this initiative or because they felt it was an insufficient amount of money to support the initiative as well as other activities. Pressures had eased, however, in the second year as LAs had learnt lessons in the first.

© Becta 2010
NOT PROTECTIVELY MARKED

Identification of schools

The original CfP guidance[1] stated that funding was allocated to LAs by formula and then LAs and schools were able to agree at a local level how the funds were delegated. In spring 2008, the number of schools actively involved in CfP in each of the eight case-study local authorities ranged from 3 to 62. There was evidence from the case-studies that, in Year 1, three of the LAs had schools that did not wish to participate in CfP (four schools in two LAs and three in the other), either due to concerns that funding was insufficient to cover connectivity or concerns about administration burden. This led to funds being spread across a smaller number of schools, which meant that eligible learners in some schools did not benefit from CfP.

Identification of learners

The CfP guidance stated that LAs and schools had to follow specified criteria for the selection of eligible learners and could then make decisions from that group about who would be provided with equipment. In the first year of CfP, most of the case-study schools seem to have applied the eligibility criteria, although a minority had targeted particular groups of learners who were clustered in particular year groups or classes (to maximise the impact on teaching and learning), which may have meant that other eligible learners across the rest of the school had not been included.

Furthermore, the guidance stated that funding allocation at the local level needed to take into account known computer access in the home. Therefore, the case-study schools had carried out audits or surveys of existing home access to inform selection. Some of the learners in the responding sample were found to have had a computer and/or connectivity in the home prior to CfP, but the case-study findings suggest that the equipment was likely to have been of poor quality or not accessible to the target group.

Further analysis of the responding sample revealed that most of the learners were from deprived areas, and those from deprived areas reported the most impact, suggesting that the initiative was most beneficial for those in most need. In some local authorities, CfP funds had been combined with other funding (such as CLC or e-learning Foundation funds, or parental contributions) in order to extend the initiative to more learners. Moreover, across case-study schools, funding in the second year of CfP had been targeted at additional learners, with greater numbers benefiting because equipment costs had become reduced over time.

Procurement and distribution of devices

In most cases, LAs took responsibility for procurement. Authorities valued Becta mini competitions for procurement because of aggregated savings. Laptops were the most frequently distributed devices among the sample and were found to have more

[1] The 2006-08 CfP guidance (which was available to the case-study LAs and Schools) can be found at: www.viglen.co.uk/viglen/Attachments/ComputerforPupils60mGuidanceDocv2.pdf

© Becta 2010
NOT PROTECTIVELY MARKED

impact on learners than PCs. It should be noted that approximately two-fifths of the learners identified by schools as being selected for CfP had not received their device at the time of the follow-up survey, two years after the initiative had been announced, although these learners were clustered in a small number of schools.

The importance of connectivity

Some challenges were faced in providing access for all eligible learners, including finding a quality and cost-effective solution within the allocated budget and accessing homes to supply the Internet via home telephone lines. The most successful connectivity solution seemed to be providing mobile Internet, which was effective in terms of providing instant access in any location, but also particularly cost-effective when purchased for large numbers of learners. Moreover, this solution was reported to have been reduced in cost in the second year of the initiative, meaning more learners could benefit.

Learners who did not have internet access at home prior to CfP, but who received it via CfP, tended to report greater impact of the initiative overall compared with other learners. This emphasises the importance of connectivity. It is important to note, however, that some eligible learners (albeit clustered in a small number of schools) had not been provided with connectivity at the time of the follow-up survey and some did not expect to receive this at all. This has implications for the initiative being able to meet its aim of providing learners with the same opportunities as their peers and for maximising the impact for learners and families in general. Moreover, there were concerns among some case-study schools about the sustainability of the positive impact of CfP once the funding for connectivity ceased, although there were examples of case-study schools that had extended the period of connectivity by using other funding/school budgets.

Supporting change to teaching practice

Learners' increased home access to ICT could, in turn, have an impact on teaching practices. As the initiative intended, most use of CfP devices occurred at home rather than in class, but there was clear evidence that CfP had enabled teachers to set more ICT-related homework and make more course materials available for learners to access at home. Teachers in case-study schools felt that some staff, particularly those who were not technically minded, would benefit from support to maximise the benefits of increased home access. Indeed, survey respondents who had received training to support their teaching reported most impact of CfP on teaching practice. There was scope for more staff to receive training on how to make use of CfP devices to support teaching and learning. In some schools, training had been provided by external ICT experts, such as staff at a CLC, who had shown staff how to maximise the use of devices.

Further impact on teaching practices seemed to be dependent on a number of factors, including the schools' organisation of CfP, the numbers of learners involved

© Becta 2009
NOT PROTECTIVELY MARKED

in a school, the clustering of selected learners within schools or classes, and learners' access to connectivity.

Engaging parents

There is evidence from the case studies that a minority of parents had declined the opportunity to be involved in the initiative, even in schools that made strenuous efforts to convince parents of the advantages of CfP. Teachers who were interviewed suggested that the reasons were that parents either already had access in the home or that they were sceptical about the 'catch' of being given a free computer. There were also reports that some parents simply did not engage with schools for any reason. Fairly low proportions of parents responding to the survey had received training or advice on either setting up or using the computer, despite the case-study evidence suggesting that schools made an effort to engage parents with training. However, in situations where parents had attended training, this was positively related to their use of their child's CfP device and their confidence to use it for different ICT-related tasks. Clearly, thought needs to be given to how to engage parents in order to maximise the impact of home computer provision in the future.

Impact on learners and families

The findings suggest that the initiative has helped to reduce the 'digital divide' and to give eligible learners the same opportunities as their peers. However, there was also evidence that some eligible learners had not yet received a device and/or connectivity, and that some parents had either declined to take part or had not collected equipment, which had reduced the impact on the 'digital divide'. The evidence suggests that the CfP initiative is meeting its aim of encouraging the development of ICT skills, particularly among learners, but also to some extent among families. CfP had clearly also supported personalised learning by, for example, helping learners to work at their own pace and do school work at home whenever they liked. There was also evidence of a positive impact on learners' motivation to learn, the quality of their work, and their behaviour in class. Moreover, there was a perception among case-study schools that CfP has been a contributory factor in raising educational achievement.

Overall, there was support across participating local authorities and schools for the principles and goals of the CfP initiative. The evaluation produced evidence that the initiative was being implemented with the appropriate target group of the most deprived learners (with a few exceptions), and that these learners were indeed benefiting in terms of motivation and skills acquired, and also in terms of perceived educational attainment improvements.

There is also reasonably strong evidence that teaching practice was beginning to change to make better use of learners' access to technology, especially where there had been training support for teachers, and that parents could be motivated through home access to become more involved in their children's education. Most of the challenges encountered in the two years of the CfP initiative evaluated here arose

© Becta 2009
NOT PROTECTIVELY MARKED

from logistical, practical and planning issues. The consensus was that any challenges were worth overcoming to reap the benefits of the increased access to technology for learning at home that CfP gave learners and their families.

© Becta 2009
NOT PROTECTIVELY MARKED

1. Policy background

For some years now it has been recognised that the 'digital divide', and specifically, the lack of access to computers at home for a substantial minority of school-aged learners, have hindered the educational motivation and achievements of some learners, particularly those in families who live in socio-economically disadvantaged areas. In 2001, for example, it was estimated that only 46 per cent of households with dependent children had internet access. This figure had increased to 60 per cent by 2003, but even by 2004, more than a third of such families (35 per cent) still did not have internet access.[2] This recognition, especially since 2005, has resulted in a number of policies and initiatives aimed at addressing this barrier to educational achievement. One of the first and most significant of these was the Computers for Pupils (CfP) initiative, which was officially launched in March 2005 by the (then) Chancellor of the Exchequer Gordon Brown.

In December 2006, the British Educational Communications and Technology Agency (Becta) commissioned the National Foundation for Educational Research (NFER) to undertake a national evaluation of the CfP initiative. This report is the final report from this evaluation and as such it pulls together all the key findings from a variety of data collection methods. The findings, and the relevant discussions and analyses, are presented in Chapters 3, 4 and 5 of this report, under the headings of 'implementation', 'support' and 'impact', respectively. Prior to presenting the findings, this chapter provides the overall context for the evaluation by detailing the key policy aims of the CfP initiative. It also locates the initiative in the broader policy context relating to the uses of new technologies for teaching and learning. Chapter 2 provides more detail of the evaluation approach and the respondent samples used.

1.1 Computers for pupils

As noted above, the Computers for Pupils initiative was announced in March 2005 when it was stated that £50 million was to be made available through Standards Fund grants for schools in deprived areas to invest in home access to information and communication technologies (ICT) for their neediest pupils. A further £10 million of funding was announced in the March 2006 budget specifically to ensure that the pupils targeted by this initiative also had safe internet connectivity.

Funding for CfP was carefully targeted and, initially, had to be used within specified time periods. Early guidance on the initiative stipulated that funding had to be spent within the allocated financial year. This meant that funding for 2006-7 had to be spent by August 2007 and funding for 2007-8 had to be spent by August 2008 (though these stipulations were modified later in the life of the initiative). The guidance also stressed that funding allocation at the local level needed to take

[2] Office for National Statistics (ONS), Expenditure and Food Surveys (2001-02 onwards).

© Becta 2009
NOT PROTECTIVELY MARKED

account of known computer access in the home and other existing or planned local initiatives to provide home access.

In order to facilitate the implementation of the initiative, various forms of support were available for LAs, schools and families, including a national conference for LAs and schools, new materials on e-safety aimed at parents, and the Computers for Pupils Support Pack, which was published in 2006. The potential benefits of the initiative for schools, teachers and parents were identified in this pack, and advice was given on pupil eligibility, the infrastructure required, relevant legal issues, and on useful sources of support for parents. The Support Pack[3] stated that:

> By putting ICT into the homes of some of the most disadvantaged secondary pupils in the most deprived areas, the Computers for Pupils initiative will help to:
>
> - give these pupils the same opportunities as their peers
> - provide conditions that can contribute to raising educational achievement and narrowing the attainment gap
> - support personalised learning by providing access to ICT whenever or wherever [it] is most appropriate for learning.

In January 2008, financial support for CfP was extended when Schools Minister Jim Knight announced a further £30 million investment for Access to Technology at Home, taking the total funding to £90m[4]. Becta issued revised guidance for LAs and schools in May 2008. In addition, by the end of 2008, extensions to capital funding had been agreed for 31 LAs, enabling these authorities to exercise a degree of flexibility in their expenditure and in the implementation of CfP in their schools.

By December 2008, it was estimated that well over 100,000 computer devices had been distributed under CfP. Furthermore, because some devices were becoming smaller and more efficient, purchase prices were sometimes decreasing and this enabled LAs to involve more pupils than had originally been anticipated, including, notably looked after children (LACs).

In many respects, the CfP initiative was innovative and the principles behind it received wide support. This initiative could be seen as a bold attempt to enable learners and families in areas of socio-economic deprivation to directly benefit from the provision of ICT for home-school use. It represented a new approach to including those families who had previously been excluded from the educational benefits of home computer access. The initiative directly targeted those learners who had been shown (through previous research) to be the most likely to benefit from home-school

[3] DfES (2006)
[4] Knight, J (2008). Speech to BETT conference.

© Becta 2009
NOT PROTECTIVELY MARKED

ICT initiatives. Specifically, it was targeted at Key Stage 3 and 4 pupils who lived in the 10 per cent most deprived areas of England (as defined by the Index of Multiple Deprivation).[5] The initiative was also innovative in the sense that one of the aims was to involve learners' families in using ICT at home for learning and communication purposes. Funding was targeted at the homes of eligible learners rather than at the school.

CfP has been a forerunner to the Home Access scheme that is being fully piloted in two local authorities (Oldham and Suffolk), and piloted with targeted groups (including looked after children) in other LAs nationally, before being fully rolled out nationally. The pilot scheme is aimed at certain low-income families with children aged 7-18 in full-time state education. Families are able to apply for a Home Access Grant, worth approximately £600, to pay for a computer and internet package.

1.2 The broader policy context

The Harnessing Technology Strategy was a key national strategy informing the CfP initiative. The Harnessing Technology Strategy was designed by the (then) DfES in order to set out a five-year plan for a system-wide approach to the application of ICT in education, skills and children's services. This plan has now been developed further: the revised and 'refreshed' strategy was published in 2008 as *Harnessing Technology for Next Generation Learning*, and an implementation plan was published in March 2009. The latter publication sets out the strategy's core goals, the objectives supporting these goals, and key priorities and key action points. The CfP initiative is not specifically mentioned in this document, but attention is given to the Home Access programme. The most relevant goal in the implementation plan in this respect is that, 'Substantial progress is made towards home access for all school-age children, with vulnerable groups supported'.[6] The plan also outlines how £600m of funding will be distributed for technology-related capital expenditure up to 2011 by means of the Harnessing Technology Grant.

After the CfP initiative had been launched, the Children's Plan became another important driver in this area. In January 2008, the Schools Minister asked Becta 'to factor in the recommendations of the Children's Plan into the next stage of our e-strategy, building on what we have achieved already'.[7] It has been stressed that the unifying theme of the Children's Plan is a partnership between schools and parents, and in this respect certain elements of the revised Harnessing Technology strategy, such as home access to computers and school-parent communications, have taken on increased importance this year. CfP was seen as a scheme that could enhance both of these policy goals.

[5] The Index of Multiple Deprivation 2004 (from the ODPM, now the Department for Communities and Local Government) was used to identify CfP target areas at a 'neighbourhood' level (so called lower layer Super Output Area or SOA), each with around 200 households or 1,500 people. To focus this initiative, the target areas have been defined as the 10 per cent most deprived SOAs across England, around 3,250 neighbourhoods. For the additional funding under Access to Technology at Home, the revised IMD 2007 was used.
[6] Becta (2009)
[7] Knight, J (2008) Speech to BETT conference.

© Becta 2009
NOT PROTECTIVELY MARKED

In addition to these two key policies, a number of other important developments, both technological and educational, occurred between 2005 and 2009. Among these were the development of the Digital Inclusion Action Plan by the Department for Communities and Local Government, and the Digital Challenge, which invited bids from local authorities articulating their vision of what an inclusive, digital community might look like. There were also numerous projects using particular technological devices, such as Personal Digital Assistants (PDAs), the introduction of learning platforms into schools, and the developing use of web 2.0 technologies by teachers and learners.

Becta's 2008 'state of the nation' Harnessing Technology survey of the uptake and uses of new technologies revealed that, in general, schools were reasonably well-equipped in terms of technological infrastructure and pupil-computer ratios continued to improve. There was a need, however, for schools and teachers to be supported and encouraged to use technology in ways that are more engaging for learners.[8]

This survey also found that schools were increasingly using learning platforms, with the largest increase reported in the secondary sector; that teachers' use of digital learning resources, especially self-created resources, had increased considerably; and that teachers generally felt that ICT played a positive role in engaging pupils in learning. The digital divide, however, continued to cause concern: The survey revealed that an estimated 27 per cent of primary school pupils and 17 per cent of secondary school pupils did not have access to computers at home at this time (January 2008).

It also should have been borne in mind that CfP was being implemented alongside many school improvement initiatives, some of which were national (notably the National Strategies), and some of which were local to the LA or the school. This meant that it was sometimes difficult to disentangle the influence of CfP from the effects of other policies and initiatives (and the impacts of these).

These and other developments are discussed at various points in the report where they are relevant to the evaluation findings. Before the findings are presented and discussed, Chapter 2 briefly sets out details of the evaluation rationale, the methodological approaches adopted, and the samples used.

[8] Smith, Rudd and Coghlan (2008)

© Becta 2009
NOT PROTECTIVELY MARKED

2. Evaluation background

This chapter provides an overview of the aims and objectives of the research, and gives an overview of the methodology and sampling processes used (detail can be found in the accompanying Technical Report). The following chapters present and discuss the evaluation findings in terms of implementation; the support provided for learners, teachers and schools; and the impact of the CfP initiative on the various stakeholders.

2.1 Aims and objectives

The main aims of the overall evaluation have been, first, to assess the impact of CfP on learners and their families and, second, to explore how schools and teachers have developed their teaching practices in order to support and capitalise on the new educational opportunities afforded by the technology. Specifically, the evaluation aimed to explore the following areas in depth:

- Implementation of CfP, including planning and management; selection of learners; procurement and installation arrangements; and monitoring and evaluation conducted by LAs and schools
- Support for CfP provided for local authorities, schools, learners and parents, and any additional support needs
- The impact and benefits of CfP for schools, learners and parents/families.

2.2 Methodology and samples

The evaluation involved distinct though interrelated strands of quantitative and qualitative research. The quantitative strand predominantly took the form of questionnaire surveys, administered in two Sweeps, and the qualitative strand centred upon in-depth case studies of participating schools and local authorities, involving interviews with all the key CfP stakeholders.

Questionnaire surveys

Information was collected by means of questionnaire surveys of three major groups of CfP ‘stakeholders’:

- teachers in CfP schools
- learners selected by the schools for participation in CfP
- parents of learners selected for CfP.

Surveys with each of these groups were conducted at two Sweeps, the first in autumn 2007-spring 2008, and the second in autumn 2008. The first Sweep of surveys aimed to collect early perceptions and expectations of the initiative (and about ICT use for teaching and learning more generally), and thus to establish baselines based on stakeholder views. The second Sweep of surveys was used to

© Becta 2009
NOT PROTECTIVELY MARKED

explore change over time and to examine the perceived impacts of the initiative for these groups of participants.

Full details about the sample frame, the responding samples, and the survey administration process can be found in Section A of the accompanying Technical Report. In summary, a target sample of 500 CfP schools was selected, which was representative of the population of all CfP schools in relation to government office region (GOR), school type, free school meals eligibility, and GCSE attainment. After exclusions (due to school mergers, for example), 488 schools were included in the final sample for Sweep 1 and 461 were included for Sweep 2. The responding schools were broadly representative of the CfP population (see Technical Report for details).

The numbers of questionnaire returns from each of the respondent groups, for each of the two Sweeps of the survey, are provided in Table 2.1 below.

Table 2.1 Questionnaire returns by instrument/respondent group

Sweep 1	**Number dispatched**	**Number returned**
Teacher questionnaire	1416	97
Learner questionnaire	1424	400
Parent questionnaire	1424	293
Overall	4264	790
Sweep 2	**Number dispatched**	**Number returned**
Teacher questionnaire	1383	99
Learner questionnaire	3970	672
Parent questionnaire	3970	543
Overall	9323	1314

Overall, the research team was pleased with the numbers of learner and parent questionnaire returns, and the numbers provided a good basis for robust analysis of the findings. Teacher responses, at 97 and 99 for Sweeps 1 and 2, respectively, were disappointing and NFER enquiries suggest that the main reason for lower than expected responses, especially in Sweep 1 of the surveys, was that teachers felt that it was ‘too early’ to give their views about CfP because either the learners had not yet received their devices, or the devices had only recently been distributed. It could also be because the CfP initiative provides learners with computers to use at home,

© Becta 2009
NOT PROTECTIVELY MARKED

thus possibly limiting teacher involvement. Nonetheless, there were enough teacher responses to carry out useful analyses.[9]

The accompanying Technical Report gives further details on the responding sample, including the extent to which samples of pupils and parents match up for comparison purposes, and the numbers of LAs and schools represented by the responding samples.

National pupil database

NPD (National Pupils Database) data was obtained in order to conduct analysis to complement the survey data, exploring the impact of CfP on attainment and attendance. Full details are given in the accompanying Technical Report.

Case studies and interviews

The basic approach for the qualitative strand of the evaluation was to look in detail at the implementation of CfP by means of in-depth interviews in eight case-study local authorities and in two schools in each LA. The case-study elements of the evaluation were carried out in three phases, as shown in the table below.

[9] Throughout this report learner and parent responses to question items are presented as percentages; teacher responses, because of their lower numbers, are presented as numbers.

© Becta 2009
NOT PROTECTIVELY MARKED

	Phase 1 Summer 2007	Phase 2 Spring/summer 2008	Phase 3 Autumn 2008
LA level	Exploratory telephone interviews with LA representatives (eight LAs)	Telephone interviews with LA representatives (eight LAs)	Follow-up telephone interviews with LA representative
School level	Exploratory telephone interviews with the headteacher or other senior manager in a sample of schools in the eight LAs	Case-study visit to two schools in each LA involving interviews with: • the headteacher or other senior manager • the ICT coordinator • at least one classroom teacher or assistant • where possible, six to eight pupils involved in the initiative • telephone interviews with selected parents	Follow-up telephone interviews with the headteacher or other senior manager in the case-study schools

© Becta 2010
NOT PROTECTIVELY MARKED

In order to start this process, in January 2007, all LAs receiving CfP funding for Year 1 or both Years 1 and 2 of the initiative were contacted (by email) in order to explore their current progress with CfP and to gain their agreement in principle to be included in the national evaluation. Following this initial contact, eight LAs were selected to be included in the qualitative elements of the evaluation. Further details about the LA sampling procedure and the sample profile are given in the accompanying Technical Report. With respect to schools, data summarised in this report was collected across an achieved sample of 13 schools within the eight LAs. Further details about the school sample are given in Section A of the Technical Report.

For simplicity, the methodologies and samples used for the evaluation have been categorised as 'surveys' (quantitative) and 'case studies' (qualitative). In practice, however, these methods were designed and implemented in ways that were complementary and overlapping, and during the life time of the evaluation, the survey findings were used to inform the case-study interviews and vice versa. The evaluation also had a strong formative, as well as a summative element, with regular feedback and reports to Becta, to enable consideration (and possible revisions and lessons learned) of the implementation and planning of the CfP initiative and its successor programme, Home Access. Details about the data analysis can be found in Section D of the Technical Report.

2.3 Structure of this report

In the following chapters, the quantitative and qualitative data, along with the policy context, are drawn together in order to provide an overarching 'narrative' based on the evaluation findings. Chapter 3 deals with the theme of 'implementation' of the initiative in LAs and schools; Chapter 4 looks at the support provided for the various stakeholder groups involved in CfP; and Chapter 5 considers a range of impacts, from impacts on teaching practice to impacts on learners' motivation and attainment and on families' communications and skills. A final chapter draws all of these findings together in order to summarise the key findings, including those for the Home Access programme, arising from the evaluation.

An accompanying Technical Report includes: further details about the evaluation design and samples; copies of the 2008 questionnaires for teachers, learners and parents; tables of basic frequency data resulting from the 2008 surveys; and details about and findings from further statistical analysis.

© Becta 2010
NOT PROTECTIVELY MARKED

3. Implementation of Computers for Pupils

Key findings

- **Lessons learned:** The evidence suggests that the local authorities and case-study schools faced some challenges when planning and managing the initiative. However, it became easier as they gained more experience over time. The findings suggested that the procurement process was more successful in the second year and the Becta mini competitions were valued by the local authorities because of aggregated savings.
- **Identifying learners:** despite clear guidance from DfES/DCSF on the selection of learners, identifying the target groups and conducting audits of prior home access were reported to be challenging for the senior leaders in the schools. Therefore, policy-makers should consider that schools may require support and guidance on selecting learners, if similar initiatives are introduced in the future.
- **Impact of the type of device:** Laptops and mobile connectivity were most likely to have been received by learners. The findings suggest that there was a relationship between laptops and the teachers' perceptions of positive impact on the learners. It may be important for those who are developing or implementing future initiatives to consider the type of device(s) that would most benefit the learners.
- **Reducing the 'digital divide':** Overall, the evidence suggests that the learners most in need (in other words, those without home access) were most likely to have been provided with devices and connectivity through CfP. However, not all of the targeted learners had yet received their devices/connectivity, some parents had not engaged in the initiative, and there were examples of eligible learners not receiving devices due to schools targeting particular groups. Thus, the impact on the digital divide could have been greater. Moreover, access to connectivity was found to be important for impact, suggesting that gaps in such provision could restrict impact.

This chapter explores how the CfP initiative was implemented in the LAs and schools included in the sample. It outlines the findings of the evaluation in relation to:

- management of CfP in LAs
- management of CfP in schools (including the selection of learners)
- procurement and distribution of CfP equipment
- monitoring and evaluation of CfP across the local authorities.

It is important to note here, as outlined in Chapter 1, that a total of £60 million was originally available for CfP over the two years 2006-08. This comprised £50m capital

© Becta 2009
NOT PROTECTIVELY MARKED

and £10m revenue. Additional funds were then made available early in 2008, taking the total funding to £90m. The capital funding was initially for equipment and related services, and the revenue funding was to provide safe internet connectivity. The revised Becta guidance (issued in May 2008) stated that all funding was, at that point, to be spent by August 2007 (Year 1) and August 2008 (Year 2). In considering the findings from the evaluation, it is important to note that across the eight case-study authorities, three had just received Year 1 funds and the remaining five had CfP funding in both Year 1 and 2.

It should be noted that, due to Becta intervention and procurement, connectivity was able to be provided using capital funding from midway through the initiative. Furthermore, 31 authorities were granted extensions to their capital funds, which could be spent by the end of March 2009 (rather than August 2009). One of the case-study authorities included in the evaluation had received this extension.

3.1 Management of CfP in local authorities

In spring 2008, the case-study authorities reported adopting different approaches to leading CfP. In five, a representative from the authority took the lead role in managing CfP. In the other three authorities, although an LA representative oversaw the initiative, most of the administration was carried out by other organisations (such as the City Learning Centre). In two of the LAs, some schools had opted out of the centrally organised scheme because they did not agree with procurement decisions being made and felt they could get better value for money themselves (for example, purchasing slightly cheaper devices that they still considered to be good quality, in order to supply equipment for more learners).

The LA representatives felt that CfP management in Year 1 had been challenging for them. Particular challenges are summarised in Figure 3.1.

© Becta 2009
NOT PROTECTIVELY MARKED

Figure 3.1 Challenges faced by LAs during Year 1

Challenges faced	Solutions
Lack of funds and capacity for administration in the first year	Funding from the School Development Grant 101 for ICT management purposes to support CfP was available,[10] although there was evidence to suggest that not all LA representatives were not aware of this. LA representatives believed in the aims of CfP and the potential outcomes for learners, so felt the time spent was worth the benefits reaped.
The time scales in which the funds had to be spent	Local authorities used additional funds (£30m) that were made available early in 2008 and utilised extensions to spending periods where relevant.

The challenges LAs faced initially were perhaps to be expected, given that the initiative was centred on giving learners access to ICT in their homes rather than at school. This was likely to have required a new approach on the part of some LAs and schools.

Overall, the representatives in the authorities with Year 2 funding agreed that the process had been simpler the second time. One representative commented that it had been, 'relatively straightforward to implement the second phase.' Overall, the interviewees felt the experience gained from the first year and the lessons learned informed and improved the management of CfP in the second year.

In some authorities, CfP funds had been combined with other funding (such as CLC or e-Learning Foundation funds) in order to extend the initiative. The representatives of these LAs reported that they had continued to use this approach as the initiative developed. For example, one of the LA interviewees who worked with the e-Learning Foundation explained, '…the more funding we have coming in, the more we can extend the programme out to schools, and the more schools can sustain the programme–so it's not a one-off impact, it will continue.'

Local authorities adopting this approach viewed it as an effective way of increasing the numbers of learners who could be allocated devices and said it would allow them to sustain the initiative.

3.1.1 Identification of schools for CfP

[10] The guidance for LAs and Schools (2006-2008, updated in May 2008) stated that none of the allocated Computers for Pupils or Access to Technology at Home funding could be retained by the LA. LAs could, however, use the funding they retained from the School Development Grant 101 for ICT management purposes to support this initiative.

© Becta 2010
NOT PROTECTIVELY MARKED

The original CfP guidance[11] stated that funding was allocated to LAs by formula (see the guidance for details). LAs and schools were then able to agree at a local level how the funds were delegated. In spring 2008, the number of schools actively involved in CfP across each of the eight case-study authorities ranged from 3 to 62. There was evidence from the case-study LAs that, in Year 1, three of the LAs had schools which did not wish to participate in CfP (four schools in two LAs and three in the other), due either to concerns about funding being insufficient to cover connectivity or about the administrative burden. This sometimes led to funds being spread across a smaller number of schools (which, in turn, meant that eligible learners in the schools 'opting out' did not benefit from CfP).

3.2 Management of CfP within schools

Senior managers in schools, typically deputy headteachers, were taking a lead role in managing CfP in schools. Managing CfP involved activities such as:

- raising awareness among staff, learners, and families. As would be expected, this was reported to be a particular focus for the senior managers at the beginning of the initiative
- selecting learners (often involving audits of home access)
- developing policies (such as home-school agreements or contracts for parents). This is discussed in more detail in Chapter 4.

The following section explores the selection of learners in more detail.

3.2.1 Schools' identification of learners for CfP

The LA representatives said that they had insisted that the schools followed Becta's guidelines on selection of learners and they had provided support for the schools, but the senior leaders were responsible for this aspect of the initiative. The senior leaders in the case-study schools had selected the learners in Year 1, and those in the authorities with Year 2 funds continued to identify new learners as the initiative progressed.

The CfP guidance states that LAs and schools had to follow specified criteria for the selection of eligible learners, and could then make decisions from that group about who would be provided with equipment.[12] Considering that the needs of each learner, school, community, and authority will be different, the initiative offered flexibility, although the guidance stated that funding must be targeted at learners in Key Stages 3 and 4 living in the 10 per cent most deprived areas, and be targeted at

[11] DfES (2006)

[12] Becta's guidance for LAs and schools (2006-2008, and updated in May 2008) stated that the funding in Year 1 was targeted at key stage 3 and 4 pupils resident in the 10 per cent most deprived areas in England and who were also eligible for free school meals. As the funding was targeted at the most deprived areas, the Index of Multiple Deprivation 2004 (from the ODPM, now the Department for Communities and Local Government) was used to identify target areas at a 'neighbourhood' level. To focus this initiative, the target areas were defined as the 10 per cent most deprived areas across England. Once these criteria were met, schools and LAs were able to agree which specific pupils would be provided with equipment and connectivity. The guidance gave details of the factors to consider when selecting pupils.

© Becta 2009
NOT PROTECTIVELY MARKED

the homes of the learners rather than at the institution. In the first year of CfP, most of the case-study schools had applied these eligibility criteria.

Table.3.1 Previous access to a computer at home

Previous home access to computers	%
Yes	51
No	47
No response	2
N = 398*	

Source: CfP follow-up Learner Survey 2008

**A filter question; all learners with a CfP device*

Due to rounding errors percentages may not sum to 100

Evidence from the follow-up survey and the case studies indicated that there were cases in which the learners who had been allocated devices and connectivity had home access prior to CfP. The follow-up survey revealed that half (51 per cent) of those targeted for CfP, who had received a computer from the school (398 learners), already had one at home (see Table 3.1); in the majority of those cases (81 per cent) this was a PC.[13]

In addition, learners who had received connectivity through CfP (227 learners) were asked if they had internet access in their homes prior to CfP. Three-fifths (60 per cent) of these learners reported that they did not have access prior to the initiative (see Table 3.2). This suggests that the learners most in need, those without internet access in their homes, were most likely to have been provided with connectivity through CfP.

Table 3.2 Previous internet access

Connectivity prior to CfP	%
No	60
Yes	36
Don't know	3
No response	1
N = 227*	

Source: CfP follow-up Learner Survey 2008

[13] Further analysis by ethnicity revealed that Asian learners were less likely to have had a computer before CfP than the other ethnic groups; 69 per cent of Asian learners reported they did not have computer in their home prior to CfP, compared with, 57 per cent of mixed race learners, 48 per cent of Black learners and 42 per cent of White learners.

© Becta 2009
NOT PROTECTIVELY MARKED

**A filter question; all learners provided with connectivity via CfP*
Due to rounding errors percentages may not sum to 100

All of the parents responding to the autumn 2008 follow-up survey were asked a number of questions about the devices and connectivity in the home prior to CfP. In total, 45 per cent of parents said that they had one computer of any type, 16 per cent reported having two computers in their homes, and seven per cent said they had three or more. Just under half (45 per cent) had internet access prior to CfP. Home internet access was most commonly broadband (85 per cent).

These findings suggest that, to some extent, learners who already had technology in their homes had received devices and connectivity through CfP. However, when reporting the existence of other devices in the home prior to CfP, it is likely that the learners referred to devices that were shared with other members of the family or that were perhaps limited in terms of their usefulness and functionality. It is important to note that when learners were interviewed in spring 2008, many complained that the devices already in their homes did not work, or that even when they did, they had limited access to them. For example, one learner said, 'we had one [a computer] but it were right old', while another said, 'it's got a virus', suggesting the computer at home was not used. Others explained that they had a computer, but no internet access. Furthermore, when the learners responding to the follow-up survey were asked, in an open question, to comment on the 'good things' about school giving young people a computer to use at home, 37 learners said that they would have their own equipment so they would not need to share a device with other people.

© Becta 2009
NOT PROTECTIVELY MARKED

LA interviewees reported that the reduced cost of devices in the second phase of procurement (such as laptops and mini-books), along with developments in mobile technology and changes to the procurement (such as connectivity being purchased with capital funds), had allowed them to include more of the learners who met the eligibility criteria. The senior leaders in the authorities with Year 2 funding said that they had identified new groups of learners who were allocated devices (ensuring that the main target group had been provided for). In addition to targeting learners without home access, a number of the case-study schools said that they had targeted younger learners (who would benefit for a longer time). Other case-study schools had targeted learners who were expected to benefit most educationally.

Case-study schools had targeted learners who met the eligibility criteria but who also had particular characteristics such as:

- Year 9 learners who were underachieving and on the borderline of gaining GCSE grade C. One LA targeted this group in order to address its priority to raise attainment.
- Looked after children (LAC), 'we put in allocations for LAC specifically, to make sure that was covered'.
- New Year 7 learners upon whom school staff felt the initiative would have most impact.

The follow-up survey revealed that the majority of teachers had targeted the learners most in need across the different age groups. Across all of the schools, an average of 16 learners received devices in Years 7-10, and lower numbers in the subsequent year groups. Approximately a quarter of teachers (25 teachers) had not targeted specific groups of learners. However, when groups were targeted for CfP, the most common approach was to target learners at Key Stage 3 (21 teachers), whole year groups (11 teachers) or Key Stage 4 learners (12 teachers).

Evidence from both the case-study research and the surveys indicated that, in some cases, CfP funds had also been combined with other sources of funding. Three of the teachers responding to the survey said that their school had combined funds in order to target a wider group of learners. Interviewees in a small number of the case-study schools also reported using other sources of funding such as CLC or e-Learning Foundation funds, or parental contributions in order allocate devices to greater numbers of learners. One of the senior leaders in a case-study school that had decided to combine CfP and e-Learning Foundation funds so that more learners would benefit from home access, explained, 'the CfP money alone would not have been enough to increase access for the number of kids that we have'. In these schools, smaller devices, such as PDAs or mini-books had been allocated to a larger number of learners.

Respondents in the case-study schools viewed selecting the learners as one of the most challenging aspects of managing the initiative, in particular, establishing whether the learners already had home access. For example, one of the senior

© Becta 2010
NOT PROTECTIVELY MARKED

leaders said that, although the authority had provided them with the lists of eligible postcodes, targeting the pupils had been, ‘time consuming and difficult’. Furthermore, attempts by these senior leaders to establish home access through the use of home audits had not been straightforward. This was because the learners reported the existence of devices in their home, but they may have been faulty or the learners had limited access to them. Figure 3.2 summarises these challenges.

Figure 3.2 Challenges faced when identifying the eligible learners

Challenges faced	Solutions adopted
Identifying learners most in need (in other words, those without home access)	School staff had conducted audits of home access. However, it was not always possible to establish if the learners had effective access.
The time and capacity needed to identify the eligible learners	LAs issued guidance to schools on the selection of learners. The LA staff provided support for the school staff (for example, they discussed the challenges they faced and suggested solutions).

3.3 Procurement and distribution of CfP equipment

In six of the eight case-study areas, the LA had been responsible for procurement, except in two LAs where schools had ‘opted out’ of the centrally organised initiative and had taken responsibility for it themselves. These two LAs had been involved in the Becta mini-competition with accredited suppliers. As the initiative progressed, most of the authorities continued to be responsible for procurement, and the process was reported to be easier the second time. In particular, the LAs involved in Becta’s mini-competition said that the process was much improved. For example, one of the representatives said, ‘this year Becta were better prepared to handle it so they turned it round much more quickly’. It may also be the case that the LA staff were more organised and supportive of the initiative as it developed.

Those involved in the Becta mini competition reported benefits such as reduced cost of the devices. For example, one of the LA representatives said, ‘Without the Becta mini competition, I don’t think we would have got the aggregated savings that we achieved’.

One of these authorities used its own procurement framework in the second year. The senior leaders also felt the procurement process was smoother in the second year. This was because they had experience of how the process worked and in some cases because there were fewer learners to accommodate.

© Becta 2009
NOT PROTECTIVELY MARKED

3.3.1. Type of device procured

The LA usually decided the type of device, and the extent to which members of staff in the case-study schools had been consulted varied. The CfP guidance (2006 and revised in May 2008) stated that it was important that the ICT equipment should support the needs of different pupils and the different intended outcomes, and include equipment that may be needed for individual pupils to access their computer. Overall, the senior leaders in the schools felt the procured devices met the learners' needs. Just one of the senior leaders was concerned about the lack of consultation on the type of device selected, because he felt the devices procured did not meet the learners' needs. Follow-up survey findings indicated that 88 per cent of parents whose children received a computer reported that they were not consulted about the type of computer their child received.

There were variations across the eight case-study authorities in the type of device procured and supplied to the learners. When the LA representatives were interviewed in spring 2008, they reported providing desktop PCs, laptops, ultra mobile PCs, and PDAs. As the initiative progressed, the authorities' device choices were influenced by the reduced cost of the devices, which had occurred since the first phase of procurement.

Evidence from the follow-up surveys and the case studies indicated that laptops continued to be the type of device most often supplied to learners. However, learners in some of the case-study schools had received smaller devices such as PDAs and mini-books. Teachers returning the follow-up survey who were responsible for implementing the initiative reported that learners were supplied with:

Laptops	55 teachers
Desktop personal computers (PCs)	13 teachers
Ultra mobile personal computers	3 teachers

Overall, LA representatives were pleased with the devices purchased and felt that they enabled the learners to do the tasks that would support their learning. Equipment procured through CfP was perceived to be of good value for money because few problems were reported and the devices were said to be meeting the needs of the learners. Furthermore, the devices were perceived to be valued by the learners. As one of the representatives of the authorities that had purchased mini-books explained, 'The little lightweight machines have been absolutely fantastic for the kids, because the kids think they are really nice, they value them'.

Senior leaders in the case-study schools also felt that the devices had met the needs of the learners, although there had been a few instances of devices being badly damaged or lost.

© Becta 2009
NOT PROTECTIVELY MARKED

3.3.2. Receipt of the CfP devices

CfP devices had been received by learners at different times during the programme. Thirty-eight per cent of learners who had already received a device at the time of the survey said they had received it during the autumn term 2007; a further 20 per cent by spring 2008; and 29 per cent after spring 2008. Similarly, the majority of the parents (66 per cent) reported that their child had received their device by spring 2008.

At the time of the follow-up survey in autumn 2008, three fifths of the learners had received their device. It is important to note that the majority of the learners who said they had not yet received their device (249 out of 258 learners) were clustered in two schools (suggesting that there had been an issue in these two particular schools). As learners who had not yet received a computer were excluded from most of the analysis and reporting, there is no danger of the learners in these two schools being over-represented and distorting the findings overall (see the Technical Report for further discussion).

Overall, when delays in distribution of devices were reported by case-study interviewees in LAs, the delays had occurred because it had been difficult to engage parents, so devices had not been collected.

© Becta 2009
NOT PROTECTIVELY MARKED

As Table 3.3 shows, of the learners who had received a computer, 79 per cent received a laptop and 19 per cent received a PC.[14]

Table 3.3 Type of device

Type of computer	%
laptop	79
desktop personal computer (PC)	19
handheld computer or personal digital assistant (PDA)	0
other	0
no response	1
N = 398	

Source: CfP follow-up Learner Survey 2008
Due to rounding errors percentages may not sum to 100

This was also reflected in the findings of the follow-up parent survey. Of those parents whose child had received a computer, 75 per cent reported that their child had received a laptop, and 24 per cent reported that they had received a PC (these percentages were 57 per cent and 39 per cent, respectively, in the Sweep 1 survey findings, so proportionately more laptops had been issued in the course of the year).

3.3.3 Connectivity

The CfP guidance stated that it was for LAs and schools to decide on the most appropriate and effective type and level of connectivity for their learners. The findings of the follow-up survey indicated that when internet connectivity had been provided to learners via CfP, it was most often in mobile internet form (40 teachers).

[14] It is unfortunate that none of the survey respondents had received a PDA, as there were examples of good practice evident in the small sample of case-study schools.

© Becta 2010
NOT PROTECTIVELY MARKED

The type of connectivity supplied to learners across the schools responding to the follow-up survey included the following:[15]

Mobile internet	40 teachers
Broadband	9 teachers
Dial-up connection	1 teacher
Not supplied through CfP	6 teachers

More than half (57 per cent) of the learners who had been given a computer through CfP said that they had internet access with it. As Table 3.4 shows, this was mostly in the form of mobile internet (59 per cent). However, that meant that at the time of the follow-up survey, approximately two-fifths of the learners (39 per cent) had not received connectivity through the initiative. This raises questions about whether CfP fully met its aims of giving the eligible learners the same opportunities as their peers. Further analysis revealed that CfP was found to have the most impact on learners who were provided with internet access, particularly those who did not have such access prior to the initiative, suggesting that providing both a device and connectivity is important for learners' motivation.

Table 3.4 Type of connectivity received by learners

Type of internet connection	**%**
Mobile internet/3G	59
Broadband	10
Dial-up connection	9
Other	6
Don't know	13
No response	3
N = 227*	

Source: CfP follow-up Learner Survey 2008
**A filter question; all learners provided with connectivity via CfP*
Due to rounding errors percentages may not sum to 100

Of those parents whose child received a computer through CfP, a similar proportion (54 per cent) reported that internet access had been supplied, with only a further four per cent reporting that it would be supplied in the future. Twenty-four per cent did not expect to receive connectivity and 15 per cent said it was not required. Where internet connectivity was supplied, parents reported that this was via a mobile

[15] A filter question: all teachers responsible for implementing the CfP scheme (N=68).

© Becta 2010
NOT PROTECTIVELY MARKED

internet connection in 55 per cent of the cases. Further analysis indicated there were only 17 cases in which learners and parents disagreed about whether connectivity had been provided through CfP.

Table 3.5 shows the types of connectivity reported to be received by the parents.

Table 3.5 Type of connectivity received by parents

Type of connectivity	%
Mobile internet/3G	55
Broadband	12
Dial-up connection	7
Other	3
Don't know	18
No response	5
N = 187*	

Source: CfP follow-up Parent Survey 2008
**A filter question; all those with connectivity*
Due to rounding errors percentages may not sum to 100

When the representatives of the eight case-study authorities were interviewed in spring 2008, five had decided to provide mobile internet connections for the learners (for example, mobile data cards or dongles) in order to provide instant access. In the remaining two LAs, internet connectivity had not been provided by spring 2008 because alternative solutions for these areas were still being explored. For example, in one of the authorities connectivity had not been provided because they were waiting for a wireless cloud. One of the senior leaders in this LA remarked, 'Prior to rolling out the CfP scheme, the infrastructure should have been put in place first, in terms of the wireless capability.' He felt that the learners in his school would have benefited more from CfP if they had received connectivity.

On reflection, the case-study interviewees in spring 2008 felt that providing connectivity to learners had been challenging. Figure 3.3 summarises the challenges faced and the solutions adopted.

Figure 3.3: Challenges faced providing connectivity through CfP

Challenges faced	Solutions adopted
The cost of providing connectivity to the CfP cohort	LAs procured mobile connectivity, which had lowered in cost during the duration of the programme. Connectivity could be purchased with capital funds during the second year.
Problems accessing learners'	Mobile connectivity was provided.

© Becta 2009
NOT PROTECTIVELY MARKED

homes to install connectivity	

Those responsible for implementing CfP in the LAs and the case-study schools reported concerns regarding the sustainability of the connectivity for the learners when CfP ends. One LA representative said, that in his view, 'families won't want to fund it after the year ends'. There were examples, however, of case-study schools that had used other budgets to extend the period of connectivity, while others felt unable to provide such support. Overall, the findings highlighted the importance of providing learners with connectivity.

3.4 Monitoring and evaluation

The CfP guidance (2006 and revised in May 2008) stated that authorities should collect information for evaluation purposes and that Becta would monitor spending on behalf of the DCSF against the LAs' allocations to ensure that LAs were getting best value for money. The LAs had provided Becta with data on expenditure in order to monitor the allocation of CfP funds. Other monitoring and evaluation activities included: monitoring internet use (four LAs); applying filters and blocks to devices; restricting learners' use of the internet (most areas); school-based monitoring (such as learners returning their device to the IT department once a term so that technicians could update virus software and also scan files to explore use); monitoring the extent of internet use (two case-study schools). Figure 3.4 summarises the approaches adopted by case-study authorities and the benefits of each approach.

© Becta 2009
NOT PROTECTIVELY MARKED

Figure 3.4: Summary of the monitoring approaches adopted

Approach	Benefit
Monitoring software	Acted as a deterrent to learners/families using the devices inappropriately.
	Provided information for the schools involved in the initiative on how the devices were being used by the learners.
Tracking software	The LA could monitor which devices were connected to the internet.
	Ensured that illegal software was not installed on the devices.
Informing local police of the initiative and providing lists of the devices issued to learners	This was viewed as a precaution and was recommended in the CfP guidance. It meant that the local police force were aware that devices had been issued if problems occurred.

Reflecting on monitoring and evaluation processes, LA representatives explained it was necessary for CfP to become embedded first, and then plan to evaluate the impact of CfP in the future. However, evidence from the follow-up case-study interviews revealed that two of the case-study schools were formally monitoring the impact of CfP on learners. For example, one senior leader was tracking learners in order to assess the impact of CfP on their attainment and behaviour. Another leader said they were monitoring the impact on learners through informal discussions. They explained that they talked to the learners about whether having the CfP device and connectivity had helped them to learn and to do their homework. The impact of CfP on the learners is fully discussed in Chapter 5.

© Becta 2009
NOT PROTECTIVELY MARKED

4. Support for Computers for Pupils

Key findings

- **Flexibility of CfP guidance:** Some case-study LAs and schools required initial clarification on the extent of flexibility allowed to select learners and allocate funding. They were unsure whether they were following guidance or rules. It is important that policymakers clarify this at the start of any new initiative.
- **Administrative demands:** LAs and schools appear to have underestimated the administrative demands of implementing CfP. They clearly felt that funding to support administration was important, but did not seem aware of funds available. There is evidence to suggest that further awareness-raising of available funding to support the administration of such initiatives is required by policymakers. Moreover, there were demands on school technicians to give technical support. Even where external support was available, learners and parents often felt more comfortable contacting the school for assistance, which added to the burden for schools.
- **Staff training:** A small number of schools had provided training for school staff on the use of ICT in teaching practice. Where training was provided, it was shown to be useful and effective in supporting ICT use for teaching. Teachers who had received some training or were going to receive training in the future reported a greater impact of CfP on their teaching practice and were more positive about CfP than those who had not received training. Schools recognised the need for teacher ICT training but needed further support in order to deliver this, possibly alongside the LA, e-Learning Foundation or City Learning Centre (CLC), where possible.
- **Engagement of parents:** Successful engagement of parents by schools helped alleviate families' concerns about CfP. Parents' receipt of training/advice was positively related to the extent to which they used their child's CfP device, as well as their confidence to use ICT for different tasks. This suggests that training had been beneficial for those parents who had received it. However, some schools clearly struggled to engage some parents with CfP and may require further advice and guidance from LAs on the most appropriate ways in which to do this.

This chapter explores the support that local authorities (LAs), schools and CfP learners and their families received, and the extent to which there have been any perceived gaps in support provision during CfP implementation.

© Becta 2009
NOT PROTECTIVELY MARKED

4.1 Support for local authorities

Overall, if they had raised queries, most of the LAs represented in the sample appreciated the support offered by Becta and the DCSF during the early stages of implementation, although they did not always agree with what they perceived to be restrictions of the initiative. It was evident from the case-study interviews that, during the early stages of implementation, some LA staff required clarification on certain aspects of the initiative, particularly in terms of the extent of flexibility in relation to the selection of learners and allocation of funding. For example, one school reported that they had agreed with Becta to target a whole year group of pupils as a 'trial'. It was evident that it would have been useful for LAs to have had further clarification from Becta about the extent of flexibility allowed—were they following guidance or rules? Clearly, it is important to clarify this at the outset of any new, similar initiative.

As the initiative progressed, case-study LAs required less advice and support from Becta. However, there was some criticism from three LA coordinators on Becta's 'light-touch' approach in supporting CfP after the initial procurement stage. For example, one interviewee commented that, 'there's been no one proactive from Becta to see how things are going', while another reiterated such sentiments and remarked that, 'they [Becta] were only interested in procurement. Once the paperwork was complete we never heard from them again.' Although Becta developed an online community forum for LAs the to share their CfP experiences, as well as LAs having the opportunity to share good practice at national CfP conferences, these interviewees felt that, while they had no specific support requirements, they would have welcomed additional informal personalised contact from Becta to see how the initiative was developing. For example, one LA interviewee had sent a letter of complaint to a supplier regarding an issue with the device purchased and had sent a copy of the letter to Becta. She was disappointed that no one from Becta had contacted her to see whether the issue had been resolved.

Guidance issued to LAs in July 2006 (amended in May 2008) outlined that, while LAs were unable to use any of the CfP funds to support administration of the initiative, they could use the funding they retained from the School Development Grant 101 for ICT management purposes to support the CfP initiative. However, it is important to note that local authority representatives interviewed did not mention that they were aware of this funding. In fact, LA staff perceived a lack of funding for CfP administration and they often reported that such costs were absorbed by the LA.

Reflecting on their role during the initial stages of implementation, LA staff remarked that the scale of the implementation task was considerable, even in an authority with only three CfP schools. For example, one LA coordinator remarked that, 'We could have done with a bit more admin support within our own systems within the LA. It was difficult to find that admin time'.

Another LA interviewee explained that their role in supporting CfP implementation was limited due to the limited resources available and reported that, 'we have a

© Becta 2009
NOT PROTECTIVELY MARKED

policy in the LA that if it isn't funded, then we don't do it'. As a result, this particular LA had little involvement with CfP schools soon after procurement. Another LA coordinator explained that he had to do 'so much on so little' and hoped that lessons would be learned for any broader home access initiative. Examples of CfP administrative tasks for LAs included the following:

- Briefing sessions with local schools to disseminate initial information on CfP. These sessions were considered imperative by LA staff in order to clarify the aims of the initiative and for schools to decide whether they wanted to participate in this initiative.
- Liaising with selected CfP schools that had agreed to be part of the initiative. However, this was limited in certain case-study LAs due to the perceived lack of funding for such liaisons.
- Procurement support for schools and liaising with suppliers. Overall, case-study schools found LA support with procurement helpful, as described in Chapter 3 (Section 3.3).
- Supporting schools in adapting school policies (for example, providing examples of e-safety, damage policies and home-school agreements). Where this occurred, and if the case-study school required such LA support, case-study school staff appreciated it and felt that it had saved them time adapting or developing a policy.
- Distributing resources to schools. In some cases, suppliers had delivered devices to the LA, which, in turn, had to arrange delivery to CfP schools. This had caused additional work pressures on LA staff.
- Attending briefing events for parents. Where this occurred, there was evidence from case-study school staff that this had been beneficial. LA staff were able to answer parents' queries about the initiative.

Some LAs who had responsibility for technical support also had the added pressure of providing on-going technical advice for learners and families.

The perceived lack of administrative support for CfP also made it difficult for LAs in other ways. For example, one interviewee commented, 'I don't even have enough money to pay for a venue or coffee for a meeting. I can't pay for expert advice or buy in extra technical support. The overall aim of CfP is laudable, but rolling it out has been problematic.'

In addition, the initial tight timescales to spend original funds in 2006-07 reported by LA interviewees during procurement, as detailed in Chapter 3, was said to have put added pressure on LAs to support implementation of the initiative. However, evidence from the follow-up interviews with LA staff indicated that certain administrative tasks had become easier over time and respondents in LAs that had received CfP funding for Year 2 (2007-08) explained that lessons had been learned from the first year by both Becta/DCSF and the LA, which ensured that implementation had become smoother.

© Becta 2009
NOT PROTECTIVELY MARKED

4.2 Support for school staff

4.2.1 LA support for CfP schools

Case-study evidence suggested that local authority support for CfP schools was more apparent during the early stages of implementation and tailed-off as schools became more confident with CfP processes. School staff explained that they, 'just got on with it'. LAs typically arranged briefing sessions for participating schools prior to the launch of CfP and thereafter, support for individual schools was on an ad-hoc basis. It was evident from visits to case-study areas that certain schools required considerable guidance to begin with, particularly in relation to the selection of learners (with some schools targeting particular groups or learners not necessarily all eligible for CfP funding). LA staff felt that schools required a good deal of guidance on how to implement CfP. For example, one LA coordinator explained that schools were 'toeing the line', but felt that they needed a great deal of advice despite having the Becta/DCSF guidance.

As explained in Section 4.1 above, some local authority interviewees reported that they were unable to sustain support for schools after procurement due to a perceived lack of funding. A small number of case-study LAs were more proactive in their support for schools. For example, one LA coordinator explained that they were in the process of setting up a website to keep all schools up-to-date with ICT progress (which would include CfP); while another local authority interviewee described how the LA had provided a telephone helpline for technical problems. However, such examples were in the minority of case-study schools. The extent to which school staff felt that their LA had been supportive with CfP varied from those who considered them to have been 'very helpful and supportive' to those who reported feeling 'frustrated' by the lack of support.

4.2.2 School arrangements to support learners benefiting from CfP

Survey data and evidence from case-study visits indicated that variations existed in the types of arrangements in place within schools to help support CfP. The first Sweep of teacher surveys conducted in autumn 2007 indicated that few schools had arrangements in place to support the roll-out of CfP, with the majority of respondents stating that such arrangements were planned for the future. Encouragingly, the follow-up teacher survey in autumn 2008 showed that schools had indeed made arrangements to help support CfP. In autumn 2008, 61 teachers indicated that their school had home-school agreements in place. Fifty-two respondents reported having internet use/e-safety policies in place, while 43 respondents had damage policies in place (see Table 4.1 below). It seems that CfP has given a 'push' to the development of schools' ICT-related policies. Schools were less likely to offer additional support for learners with disabilities or special educational needs, but this could be due to this support not being necessary for the target group. Schools had little planned to further support the CfP initiative.

© Becta 2009
NOT PROTECTIVELY MARKED

Table 4.1 Support for CfP

Arrangements in place to support CfP	Taken place N	Planned N
Home-school agreements	61	2
Internet use/e-safety policy	52	6
Damage policy	43	5
Raising awareness of CfP for school staff	34	6
Monitoring the use of equipment at home through ICT software	19	6
Additional support for learners with disabilities/special educational needs	15	9
Visits to learners' homes by staff to support the use of ICT	6	7
No response	18	62
N = 82*		

Source: CfP follow-up Teacher Survey 2008
Multiple response questions
**Filter questions; those who help to implement CfP as well as teach selected group*

Despite an increase in the number of schools that had arrangements in place to support CfP, evidence from the case studies suggested that schools would have liked to have made further supportive arrangements, for example more awareness-raising among school staff. However, emulating the concerns of LA staff (as detailed in Section 4.1 above), interviewees from case-study schools indicated that CfP administration had been more work than they had envisaged, and therefore they had prioritised this over activities such as arranging awareness-raising sessions for teachers and teacher training.

Typically, senior managers (often deputy headteachers) were responsible for the administration and coordination of the initiative, which was reported as being considerable, with 'huge time implications' particularly during the early stages of implementation. School interviewees reported that they had absorbed this cost. While all case-study schools commented on the administrative burden of CfP, interviewees in schools where numbers of targeted learners were low[16] had underestimated the large administrative effort required for even a small cohort of learners.

[16] The May 2008 CfP guidance for LAs and schools states that CfP funding should focus on schools where 30 or more learners are eligible, in order to minimise the administrative load at school and LA level. Despite this, some LAs decided to target funding to schools with lower target groups as they felt that channelling funding to these learners was the most effective use of funding.

© Becta 2009
NOT PROTECTIVELY MARKED

CfP administration within schools usually involved the following:

- Arranging briefing events for learners and families. These were considered imperative in order to brief parents about CfP as well as to provide ICT training to ensure families understood how to use their device.
- Organising letters home to parents (for example, prompting parents to return signed home-school agreements or direct debit forms if they were paying a financial contribution). This was thought to be a way in which to engage parents who had failed to attend CfP briefing events organised by the school. While it was considered but one strategy for engaging parents, school staff explained that it still was not always a successful one.
- Reminding and encouraging families to collect devices. As stated above, schools reported that certain families were difficult to engage with and staff struggled to identify the most appropriate way in which to make contact with certain CfP parents. In a small minority of cases, parents had not collected devices from schools.
- Arranging home-visits to deliver devices to families. Despite letters home to families and phone calls requesting parents visit the school to collect devices, certain parents still failed to engage with CfP. There were a few examples of case-study school staff having to deliver devices directly to learners' homes, as parents had not attended CfP briefing sessions.
- Dealing with insurance claims. Staff in case-study schools reported that parents had sought support from the school with the administration.
- Providing technical support for learners (and families to a certain extent). This is explained in more detail below.

School technicians were also experiencing the administrative demands of CfP, even in case-study schools where the LA or supplier was meant to be the main contact for technical support. Case-study interviewees revealed that families often felt more comfortable contacting the school to resolve technical issues, even though the autumn 2008 teacher survey revealed that equipment suppliers were often responsible for providing technical support (41 respondents) compared to the school (39 respondents) or the LA (17 respondents). For example, one deputy headteacher explained that the school traditionally had strong links with the local community and, as a result, families believed that the devices came from the school. Therefore, technical issues were resolved by the school. He explained that, 'the parents see us as the people who've given out the machine that's faulty, so it must be down to us'. In the majority of other case-study schools, technical staff had spent considerable time setting up CfP devices and loading software to ensure compatibility with school systems. This had not only put a burden on staff, but had also contributed to delays in learners receiving their equipment.

Evidence in two case-study schools, however, suggested that a CLC technician based in the school to support CfP learners (see Section 4.2.3) during allocated times in the week was invaluable in easing the burden on school technicians.

© Becta 2009
NOT PROTECTIVELY MARKED

Unfortunately, the CLC was unable to sustain such support and school staff faced the challenge of finding a way to continue technical support for CfP. Moreover, this external support would not have been available for some schools.

Despite the demands on staff time to administer CfP, the general consensus was that, 'it's worth it because of the benefits we'll reap as a result' and, as schools became more familiar with the demands of the initiative, case-study research indicated that the administrative workload appeared to become reduced and easier over time.

4.2.3 Training for school staff

As detailed in Table 4.2 below, the follow-up teacher survey revealed that some teachers had received training (26 respondents) or reported that they would receive training in the future (17 respondents) to support extended access to ICT through CfP.

Table 4.2 Teachers' receipt of training to support extended access to ICT

Has training been received	**N**
Yes, already received	26
No	22
Yes, will receive in the future	17
Don't know	6
No response	11
N = 82*	

Source: CfP follow-up Teacher Survey 2008
**Filter questions; those who help to implement CfP as well as teach selected group*

Interestingly, further analysis of responses to the teacher survey in autumn 2008 revealed that teachers who had received some training or were going to receive training in the future, reported a significantly greater overall impact of CfP on teachers and teaching practice. They also were considerably more positive about the initiative in general than those who had not received training. This could indicate that, when teachers are guided on how best to use ICT to improve their teaching practice, they are more likely to appreciate the benefits that increased ICT access can have on their teaching practice (see Chapter 5 for more details).

Such evidence was supported by the case-study research in which the general consensus was that pedagogical support was important in order to maximise the benefits of ICT use within teaching and learning. For example, some school staff explained that teachers who were not as 'technically minded' may benefit from training and without such support would not plan to use the devices or the increased access to ICT that CfP instigates. Certainly, where learners were encouraged to bring their devices into school, one clear and useful message from an ICT manager

© Becta 2009
NOT PROTECTIVELY MARKED

was that, if pupils have access to ICT in class, ‘we need to support staff to get in the frame of mind of using them [computers] more often so it becomes seamless’.

Training for teachers specifically resulting from CfP was evident in four case-study schools, and delivered either by the school’s own ICT technicians or by external organisations at no cost to the school, such as the e-Learning Foundation or CLC (examples are detailed in the box below). Training appeared to be for selected staff, for example, within certain year groups or subject departments where the CfP initiative was being concentrated.

© Becta 2009
NOT PROTECTIVELY MARKED

Case-study: The City Learning Centre (CLC) and e-Learning Foundation supporting CfP schools

CLC staff offered a range of support to selected teachers in all CfP schools in one local authority during the early stages of implementation. This support included a demonstration on how to use the features of the device (a PDA), advice on how to maximise its use in class, and development of resources and software to assist teaching. In addition, CLC staff produced user guides for CfP learners and their families, presented at parents' evenings, and ran additional training sessions for learners in school. Moreover, a technician from the Centre was based in each CfP school at allocated times during the week to offer technical support for learners and staff up until the academic year 2008-09.

Such support was considered 'invaluable' in assisting teaching staff to maximise impact on learning. For example, a senior manager in one school explained that such support was, 'absolutely 100 per cent essential to the project…without them the project would never have got off the ground'. CLC involvement had reduced added pressure on the school.

Follow-up interviews with staff in case-study schools in early 2009 revealed that the CLC was unable to sustain such support due to the costs involved. From this point, it was the responsibility of schools to fund such training, and this posed a considerable challenge.

In another local authority, CfP schools received support from the e-Learning Foundation, which ran sessions for teaching staff during the early stages of implementation, showing staff how to use devices (laptops) and use them effectively in their teaching practice. The Foundation also helped arrange an e-learning day for schools in which learners completed online and offline tasks.

In some local authorities, training programmes to support the more general development of the learning platform were offered to all local schools, and LA staff believed that this would address school staff training needs for CfP. Local authorities were supporting schools with the development of learning platforms, including user guidelines, and had arranged briefings for school staff and training sessions for key people within schools. Such training was considered important, as one LA interviewee explained, 'Schools haven't tied CfP and the learning platform together very well. They're not using the platform as well as they should be'.

LAs acknowledged that schools needed additional support to develop learning platforms and were keen to provide this support in the future (see Chapter 5 for more information on teachers' use of learning platforms).

© Becta 2009
NOT PROTECTIVELY MARKED

Reasons why awareness raising and/or ICT training for school staff had not been arranged in most case-study schools included the following:

- learners were often spread across different year groups and, in schools with small cohorts, numbers were not considered large enough to have a whole-school directive on ICT in addition to existing efforts to improve teaching and learning within the school
- a small number of school staff also expressed the concern that there were learners within the school who still did not have home ICT access (and who were not eligible for CfP funding). Interviewees felt that they needed to ensure that all pupils had home ICT access before embarking on a training programme for teaching staff.
- time and funding in order to support such training was limited and the administrative demands on staff time, as mentioned above, were a priority.

4.3 Support for learners and parents

Becta/DCSF Computers for Pupils guidance for local authorities and schools stated that learners and families should be made aware of local policies on computer use. This guidance also drew attention to any monitoring or filtering software installed on devices. Furthermore, the guidance outlined the importance of schools providing support for learners and families in order for them to maximise the benefits of having personal access to ICT. Becta provided sample agreements and templates to all participating LAs as part of a support pack issued at the 2006 CfP launch conference.

4.3.1 Support for parents

In total, 44 per cent of parents responding to the follow-up survey reported that they had received a CfP parent guidance pack, with the majority of these finding it very or fairly useful (86 per cent). Only four per cent reported that they had not read the guidance. As stated earlier, it was most often schools, not LAs or suppliers, that provided support for learners and families. Table 4.3 below shows the types of support and advice 'CfP families' had received from the school, as reported by parent respondents to the autumn 2008 survey (Sweep 2).

Table 4.3 Support from school

School has given advice/training about:	Yes %	No %	Will do in future %	Don't remember %	NR %
How the computer can support my child's learning in the home	43	45	1	5	6
Internet safety (for example, safe use of chat rooms, websites)	34	50	1	7	8
Learning how to set the computer up	32	57	0	4	7

© Becta 2009
NOT PROTECTIVELY MARKED

Getting the internet working	30	54	1	7	8
Understand how to use software	27	58	0	6	9
Setting up passwords	20	64	0	7	8
Using email	14	69	1	6	10
N = 322*					

Source: CfP follow-up Parent Survey 2008
**A filter question; all those with a CfP device*
Due to rounding errors percentages may not sum to 100

As can be seen from Table 4.3 above, more than two-thirds of the parents of learners with a CfP device had not received training/advice on the practicalities of either setting up their device or using the computer. While the proportion of parents who had received such support was reportedly low, it is questionable as to whether parents actually required such training, as 72 per cent of parent respondents also reported that they were either very or fairly confident using computers. None of the parents interviewed within the case studies reported that they needed additional support to use their computers. However, further analysis of the parent survey data showed a positive relationship between receipt of training/advice and the extent to which parents used their child's CfP device and felt confident in doing so for a range of ICT-related tasks. This finding suggests that training had been beneficial for those who received it.

This is not to say that schools had not offered training to CfP families. There was evidence in the majority of case-study schools that learners and/or families had been invited to events created to distribute devices and demonstrate how to use them. Some families were said to be initially apprehensive of CfP and school staff had needed to work hard to alleviate any concerns or anxieties families had about the initiative. As described earlier in Section 4.2.2, strategies included sending letters home to parents outlining the initiative, prompting them to collect devices or return signed home-school agreements, as well as arranging home visits to deliver devices when this was considered necessary. Some evidence even suggested that representatives from external agencies, such as equipment suppliers or personnel from the e-Learning Foundation or CLC, had attended launch evenings to support schools during launch events and had provided pupils and parents with an induction on how to use their device. Such briefing sessions also included the following: e-safety[17], guidance on device restrictions, connectivity guidance (if supplied through CfP), an overview of home-school agreements and how parents could support their children with their learning.

[17] A safety resource for parents, developed by Childnet International, was distributed to participating LAs in autumn 2006 with the intention that this be distributed alongside CfP devices. The resource was available both online and as a CD-Rom and was accompanied by a small booklet in nine different languages.

© Becta 2009
NOT PROTECTIVELY MARKED

There was also some evidence from the case-study research that schools had offered additional support to learners and families after initial briefing sessions, for example through:

- technical help lines: there were usually technicians within schools able to assist learners and their families with technical difficulties
- additional technology training sessions targeted at CfP learners and/or their families: for example, two case-study schools had organised evening technology sessions for CfP families (in addition to the initial CfP briefing).

Although this support was offered to all families, attendance at these briefings was reportedly low. Schools clearly struggled to devise innovative ways to engage families, which can be the case generally when schools attempt to involve parents in activities or initiatives. This suggests that perhaps schools require more support and guidance in how to engage parents in the future when launching similar initiatives.

In case-study schools that received additional funding in Year 2 (2007-08), some staff remarked that parent response had been more positive during the second phase, possibly as some of the anxieties families experienced in the first year had been alleviated. Staff reported that parents needed less convincing as word of mouth helped disentangle some of their anxieties during Phase 1 implementation of CfP.

Despite low parental attendance at launch events, school staff valued the importance of arranging these events for CfP families. Further analysis of the autumn 2008 parent survey findings supports this claim:

- parents who had received training reported higher levels of confidence in completing particular ICT tasks
- parents who had received training (for example advice about using email, setting up passwords, supporting their child's learning, internet safety, or getting the internet working) were more likely to report that the device had been useful for them.

4.3.2 Support for learners

Evidence from the follow-up learner survey in autumn 2008 revealed that the majority of learners did not require help using their CfP device. Overall, 91 per cent of learners reported that their device always or usually worked. While the majority stated that they did not require help (77 per cent), those who did (20 per cent) reported that this was mainly technical support when the device did not work, getting the internet working, or initial support to set up the computer (see Table 4.4 below). Learners who required support explained that help was received from a variety of sources, including:

Parents	46 per cent
Teachers	36 per cent

© Becta 2009
NOT PROTECTIVELY MARKED

ICT technicians	31 per cent
Siblings	29 per cent
Friends	24 per cent

© Becta 2009
NOT PROTECTIVELY MARKED

Table 4.4 Technical support for learners

Technical support required	%
Help when my computer didn't work/broke down	56
Getting the internet working	54
Learning how to set up the computer	40
Understanding how to use the software programmes on the computer	30
Setting up passwords	15
Using email	14
Finding my online learning space	11
Other	11
No response	5
N = 80*	

Source: CfP follow-up Learner Survey 2008
A multiple response item
**A filter question; all learners who had received a device and had asked for help*
Due to rounding errors percentages may not sum to 100

Further analysis of learner survey data in autumn 2008 revealed that learners who stated that their device always worked tended to have a more positive attitude towards computers than learners who reported that their device usually worked. Unsurprisingly, learners who indicated that their device never worked (albeit only five per cent of learner respondents) reported a substantially smaller impact of the initiative overall. However, none of the learners interviewed within the case studies reported that they needed additional support to use their computers, nor were there any reports of additional requests for support from parents who were interviewed. Indeed, one parent remarked that, 'the school's done very well in supporting them [learners] using it'.

4.3.3 Special Educational Needs (SEN) support

Only three per cent of respondents to the autumn 2008 parent survey reported that their child required additional support to use a computer because of any SEN or disability. These respondents indicated that their child mainly required a larger monitor for the device. This is unsurprising, considering that the majority of CfP schools purchased laptops or ultra mobile devices that feature screens smaller than traditional desktops monitors (see Chapter 3, Section 3.3.1, for more information on the types of CfP devices purchased).

4.4 Further support requirements and lessons learned

Particular types of support for schools, learners and families were provided and were found to be important in implementing the CfP initiative. However, there are clear implications where reduced support was evident and where there could be scope to

© Becta 2009
NOT PROTECTIVELY MARKED

provide more support for learners and families during the implementation of home access initiatives in the future, for example:

- support with the administration demands that such initiatives require
- support with teacher training in ICT use within their teaching practice in order to maximise the benefits of home ICT access
- support for schools in how to engage families in ICT training. Clearly, when parents attended training, the experience had a positive impact on their views of CfP and on equipment use.

In addition, while learners appeared generally confident using their devices, there was some evidence to suggest that certain groups of learners may require more support than others. For example, further analysis of the autumn 2008 learner survey data revealed that learners who did not have a computer prior to CfP tended to have less confidence in their ability to complete ICT tasks than other similar learners. Furthermore, Asian learners were less likely to have had a computer at home prior to CfP than other ethnic groups. Therefore, it may be that these families require more support in using ICT.

Interestingly, the year group of respondents was also strongly related to confidence levels, with older learners tending to show higher levels of confidence in using a computer than similar younger learners. Older learners also tended to make greater use of their device than similar younger pupils.[18] Support may therefore need to be targeted accordingly.

[18] There were no differences between ICT confidence levels across genders.

© Becta 2009
NOT PROTECTIVELY MARKED

5. Impact of the Computers for Pupils initiative

Key findings

- **Reducing the 'digital divide':** The findings suggest that the initiative has helped to reduce the 'digital divide' and to give eligible learners the same opportunities as their peers. However, some eligible learners across a small number of schools had not yet received a device and/or connectivity, and a small number of parents had either declined to take part or had not collected equipment, which had slightly reduced the impact on the 'digital divide'.
- **ICT skills and communication:** The evidence suggests that the CfP initiative has largely met its aim of encouraging the development of ICT skills, particularly among learners, but also to some extent among families. Evidence also suggested that parents would find it useful to be able to gain access to information about their child electronically, although those who had access to a learning platform were not using it to a great extent, which could indicate a support requirement.
- **Educational achievement:** Evidence from the surveys and case studies suggests a perception that CfP has been a contributory factor in raising educational achievement. There is also evidence of a positive impact on learners' motivation, the quality of their work, and their behaviour in class.
- **Personalising learning:** Evidence suggests that CfP has supported personalised learning, but there is scope for more access to, and use of, learning platforms to further maximise this impact.
- **The significance of connectivity:** CfP was found to have the most impact on learners who were provided with internet access, particularly those who did not have this access prior to the initiative. The sustainability of internet access was raised as an issue, but considered important for the scheme's long-term impact.
- **'Types' of learners:** The evidence suggested that it was mostly, although not always, the learners who met the CfP eligibility criteria who benefited most from the initiative. The evidence is clear that the most 'deprived' learners have reported most impact, including those who did not have access to the internet prior to CfP. Thus, the 'right' learners are benefiting most; LAs and schools need to consider this carefully when selecting learners and allocating funds.
- **Impact on teaching practice:** There is clear evidence that teachers were maximising the benefits of learners' increased access to ICT by setting more technology-related homework and by and making resources accessible to learners. Impact in school/class varied and was dependent on factors such as the numbers of learners benefiting from CfP, whether they were clustered within year groups/classes, and on the type of device learners used and whether they were used in class (as intended, most learners were using their device at home, rather than at school or in class).

© Becta 2010
NOT PROTECTIVELY MARKED

The CfP initiative aimed to:

- give eligible learners the same learning opportunities as their peers
- provide conditions that contribute to raising educational achievement
- support personalised learning by providing access to technology
- encourage the development of ICT skills among learners and families.

It was also anticipated that the CfP initiative could have a broader impact on teaching and learning practices (although this was not a specific aim of the initiative), if teachers maximise the benefits of learners' access to ICT by encouraging the use of technology in class and/or setting homework involving the use of technology. The increased access to ICT at home could also have a broader impact on the way schools, learners, and families communicate. The evaluation of the CfP initiative has explored perceptions of the impact in relation to these factors. In this chapter, the findings are reported in relation to impact on:

- teachers and teaching practice
- learners
- parents and families.

5.1 Impact on teachers and teaching practice

Although the principal aim of the CfP initiative was to give eligible learners increased access to ICT at home, it was anticipated that the initiative could have had a broader impact on teaching and learning in schools or classes if teachers maximised the benefits of increased access to ICT in their practices. The CfP guidance, for instance, suggested that teachers should be encouraged to include opportunities for using ICT at home when planning work programmes and setting homework.

© Becta 2009
NOT PROTECTIVELY MARKED

The case-study evidence suggested that the extent of such impact on teaching practices varied according to:

- the number of learners benefiting from CfP within a school
- the extent to which learners benefiting from CfP were spread across the whole school or clustered in particular year groups/classes
- the type of device distributed.

Full details are given below. The case-study evidence has shown, for example, that the distribution of CfP devices varied across schools. In some schools, numbers of learners who had received devices were small, thus limiting the impact on teaching and learning in schools or classes. Moreover, where clustering of learners with CfP devices had occurred in particular classes and/or year groups, teachers felt more certain that all learners would have access and, therefore, felt more able to change their teaching practices as a result. This was not the case in most schools in which learners with devices were scattered across the school (due to them following the eligibility criteria carefully).

The type of device will also have an impact on whether a teacher is able to encourage use in class (this is possible with PDAs or laptops which are mobile, but not always with desktop PCs). The case-study evidence also suggested that not all schools encouraged learners to take their device into school even if it was mobile, and that some learners do not wish to carry certain types of laptops as they are relatively heavy. For example, as one teacher explained, ‘The laptops are bulky and there’s nowhere to store them. Only 60 per cent bring them in. If they had been smaller it would have worked far better and students would have bought them backwards and forwards’.

As learners did not always take their laptops to school, teachers either had to do group work in which they shared a device (which was not considered as effective) or they had to have a contingency lesson plan, ‘You need to go with a contingency plan, which increases the planning burden. You’re not thinking about one lesson, you’re also thinking about an alternative’.

A minority of case-study schools did not allow learners to transport laptops to school as they were concerned about learners’ personal safety. Similarly, 42 per cent of the 543 parents who responded to the follow-up survey said they would worry about their child’s safety if they had to carry a mobile computer (including laptop or PDA) to and from school, compared with 25 per cent who felt that their child would be safe. Among the 15 learners who took their laptop to school, five felt safe and five were worried about their safety (the other five did not know or did not respond). However, as discussed in Chapter 3, there was no evidence to suggest that any learners had experienced any threats to their personal safety.

Thus, the impact on the use of the equipment in class will depend on how individual schools have been implementing the initiative. For example, 83 of the 99 teachers who responded to the follow-up teacher survey in the autumn 2008 survey reported

© Becta 2009
NOT PROTECTIVELY MARKED

that, as intended, learners mostly used their ICT equipment at home. Ten said equipment was used equally at home and at school, and only five said that it was mainly used at school.

Moreover, only eleven of the 99 teachers responding to the follow-up survey said that they encouraged learners to take their computer to school to use in lessons, despite 58 of them saying that learners had received either a laptop or an ultra mobile personal computer. Similarly, only 15 of 398 learners (four per cent) who reported receiving a laptop said that they took it to school; only three of those said they used it in lessons.

There were, however, some good examples of using CfP devices in classes in case-study schools. For example, case-study evidence from three schools showed that PDAs were being used effectively in class and were seen to be having an impact. The following vignette gives an example of PDA use in class.

© Becta 2009
NOT PROTECTIVELY MARKED

Case-study: PDA use in class

The school had targeted two Year 10 media studies classes and had provided each learner with a PDA. During a visit to the school, researchers observed that all learners in both classes seemed engaged in using their PDAs. In one class, learners were using the PDA video recorder to produce an advertising campaign. In the other class, learners were entering an online competition that involved submitting creative text. PDAs also were used to collect learner votes and for the class to access course/revision materials and homework.

The City Learning Centre had helped support class use of the device and had developed a file management system, a storage area learners used to hand in work. The teacher annotated work and then learners picked up her comments via their PDA. One of the media studies teachers said, 'they [the PDAs] make the lessons far more engaging...they [the learners] are far more positive than they have ever been'. She felt that the PDAs had a real impact on individuals who were considered to be otherwise 'disengaged': 'It offers them different ways of learning. They are interacting more with each other. It is definitely enhancing their learning'. The PDAs had helped learners to focus their attention and engage them in learning. Learners thought that the PDA had 'made it more fun' and 'made it easier to find out information'.

It is perhaps not surprising that further analysis of the survey data showed a significant relationship between teachers who reported that learners mostly used their devices at school and teachers who felt that there was a greater impact on teaching practice (but numbers of teachers in these categories were small). However, it is clear that the type of device and method of implementation in schools are likely to have an impact on the extent of change to teaching and learning.

5.1.1 Impact on teaching activities

The variation in how CfP was implemented, as described above, is perhaps reflected in the finding that 54 of the 99 responding teachers said that CfP had an impact on teaching practice 'to some extent', eight said 'to a great extent', but 33 said 'not at all'. It should be reiterated here that this was not a specific aim of the initiative.

© Becta 2010
NOT PROTECTIVELY MARKED

Table 5.1 Teachers' views on impact of CfP on teaching practice

Impact on teaching practice	To a great extent N
To some extent	54
Not at all	33
To a great extent	8
No response	4
N = 99	

Source: CfP Follow-up Teacher Survey 2008

Those who said that CfP had an impact on teaching practice to a great extent or some extent were most likely to mention that they had set more technology-related homework (such as research using the internet) rather than mention changes to teaching in class. In contrast, those who reported that the initiative had not had an impact on teaching practices were most likely to have mentioned that not enough learners had been involved or that there were limitations with connectivity (restricting the work they felt able to set). It is worth emphasising here that one issue was raised in the majority of case-study schools: because the funding for connectivity only covered one year, there was a perception that any long-term impact of the initiative on teaching and learning was limited without an extension of such funding. There were, however, examples of case-study schools that had extended the period of connectivity by using other funding/school budgets.

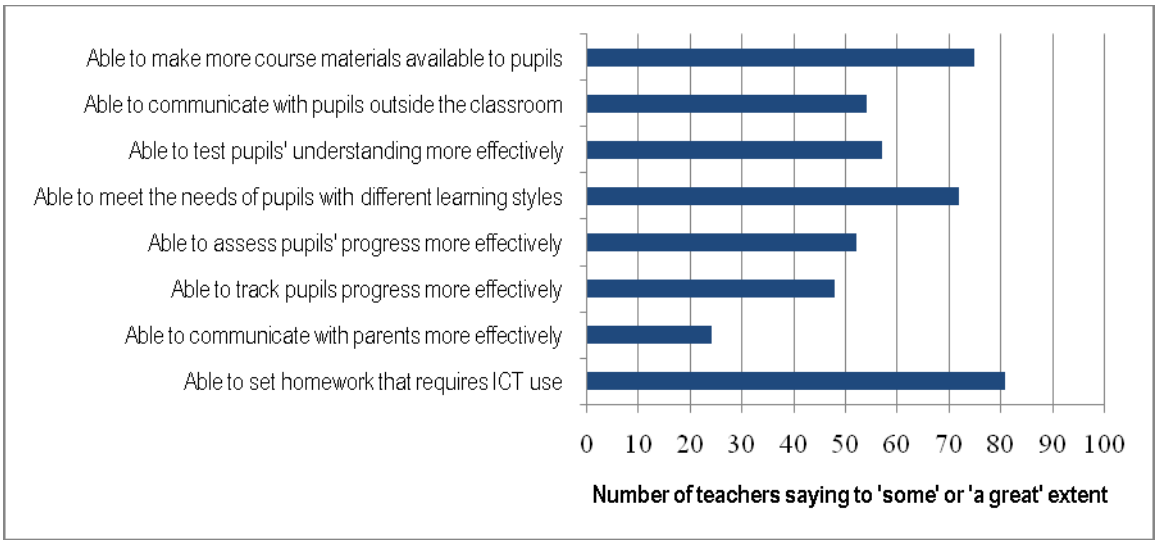
When asked to comment on a list of specific teaching activities, teachers were most positive about the increased home access to ICT having enabled them to set homework that required technology use (as shown in Figure 5.1 below, 81 reported that this was the case 'to a great extent' or 'to some extent'). The findings from the learner survey complement this finding, with 68 per cent of learners using a CfP device reporting that their teachers asked them to use their computer to do homework.

Teachers were also positive in that they took the view that the increased home access had enabled them to make more course materials available to pupils (possibly via a learning platform; see Section 5.1.3). For example, one teacher in a case-study school commented, 'It's that accessibility. Personally I have found the ability to share resources with pupils to be the biggest advantage'.

Almost three-quarters of the teachers also felt that the increased home access had helped them to meet the needs of learners with different learning styles, suggesting that the initiative was meeting its aim of supporting personalised learning (see Figure 5.1 below).

© Becta 2010
NOT PROTECTIVELY MARKED

Figure 5.1 Teachers' views on impact of CfP on teaching practice



Source: CfP Follow-up Teacher Survey 2008
A series of single response items

Interestingly, the findings from the first Sweep of surveys revealed that these were the areas in which teachers had expected CfP to have most impact. As teachers had initially expected, the increased home access was thought to have had less impact on communication with parents.

The following table illustrates that almost all teachers felt that ICT is important for learning. The table also reiterates that teachers were positive about the impact of CfP for personalised learning (see Section 5.2.8 for more information on impact on personalised learning). Teachers were more neutral about whether there had been a change to teaching styles as a result of the initiative (this could be due to the issues raised above in relation to numbers and clustering of learners and whether or not learners were using their devices in class).

© Becta 2009
NOT PROTECTIVELY MARKED

Table 5.2 Teachers' views on their attitudes towards CfP

Teachers attitudes towards ICT and CfP specifically	Strongly agree N	Agree N	Neither agree nor disagree N	Disagree N	Strongly disagree N	NR N
As a result of CfP, teachers have changed their teaching styles	5	16	48	21	6	3
CfP has contributed to ICT professional development	7	37	30	15	8	2
CfP has helped to reduce teachers' workload	2	12	37	34	12	2
ICT is important for learning	56	38	3	0	0	2
CfP has helped to support personalised learning	25	52	15	4	1	2
I prefer students to learn using books	0	5	36	29	27	2
CfP has created more problems than it will solve	2	14	36	24	20	3
Teachers have given more electronic homework as a result of CfP	13	35	30	10	9	2
N = 99						

Source: CfP Follow-up Teacher Survey 2008
A series of single response items

© Becta 2010
NOT PROTECTIVELY MARKED

5.1.2 Use of ICT in the classroom

As discussed above, learners' increased home access to ICT could, in turn, have an impact on teaching practices in the classroom. Teachers may become encouraged to maximise opportunities for the use of ICT when planning programmes of work. Therefore, one hypothesis might be that teachers make more use of ICT in general in class. In order to explore this, teachers were asked about their use of different types of ICT.

As evident from both Sweeps of the teacher survey (conducted in the autumn 2007 and 2008), the use of interactive whiteboards in classrooms was fairly common. The use of personal computers and laptops was also fairly frequent in comparison with some other technologies. It is interesting to note that 70 of the 99 teachers said that digital cameras were being used in at least some classrooms.

Since the first Sweep of surveys in autumn 2007, a greater proportion of teachers said that interactive whiteboards were used in *all* classrooms. It was also more likely by the second Sweep in autumn 2008 for digital cameras to be used in class. However, given the relatively small numbers of teachers who responded to the Sweeps of surveys, it is difficult to draw accurate conclusions about the impact of CfP on the use of these technologies.

© Becta 2010
NOT PROTECTIVELY MARKED

Table 5.3 Teachers' views on use of ICT at follow-up (autumn 2008)

ICT use in the classroom	All classrooms N	Most N	Some N	None N	Don't know N	NR N
Interactive whiteboards	37	19	17	1	0	8
Personal computers (PCs)	13	18	41	3	0	7
Laptops	10	15	42	7	0	8
Wireless projectors	7	4	10	44	6	11
Digital cameras	3	7	60	2	0	10
Visualisers	3	0	21	39	9	10
Handheld computers or Personal Digital Assistants (PDAs)	3	1	9	56	6	7
Wireless slates/tablets	2	0	24	44	2	10
Voting systems	2	3	35	29	6	9
Assistive technologies	1	3	21	33	11	13
N = 82*						

Source: CfP Follow-up Teacher Survey 2008
A series of single response items
A filter question; all those who were involved in teaching **and implementing CfP*

Although not all of the small sample of responding teachers reported having changed their teaching styles, the findings from the larger learner follow-up survey conducted in autumn 2008 suggest that frequent computer use (often or very often) had increased since the initial 2007 survey in all lessons listed. Overall, the subjects most likely to include frequent computer use remained the same (ICT, 80 per cent; English, 45 per cent; design and technology, 39 per cent; science, 35 per cent; and mathematics, 34 per cent), although use had increased across all lessons. This could suggest that although most learners did not take their CfP devices into class, teachers had become more aware of the benefits of using ICT and of the fact that more learners had access at home.

5.1.3 Impact on teachers' use of a learning platform

At the time of the follow-up survey (autumn 2008), 50 teachers across 40 different schools said that their school had a learning platform (an ICT system used to support and deliver learning within and outside the classroom). At the heart of any learning

© Becta 2010
NOT PROTECTIVELY MARKED

platform is the concept of a personalised online learning space for learners. Therefore, providing learners with access to ICT and a learning platform at home should support personalised learning. This learning platform could offer teachers and learners access to stored work, e-learning resources, communication and collaboration with peers, and the facility to track progress.

Teachers who had access to a learning platform were asked about the extent to which their use of it had changed since the introduction of CfP. Responses were mixed, as illustrated in Table 5.4 below, but approximately half of those with access to a learning platform felt more teachers were using it as a repository of documents and resources for teachers and learners. This was also evident from the case-study research. There was also evidence of some increased use for setting homework and for accessing information about learner progress and performance. However, there is perhaps more scope for teachers to maximise the benefit of learners' increased home access to ICT by further expanding their use of the learning platform.

© Becta 2009
NOT PROTECTIVELY MARKED

Table 5.4 Teachers' views on their use of the learning platform

Change in use of the learning platform resulting from CfP	Strongly agree N	Agree N	Neither agree nor disagree N	Disagree N	Strongly disagree N	NR N
More teachers are using the LP (in general)	9	13	13	8	4	3
More teachers are accessing information from the LP about pupil progress and performance	7	13	10	11	6	3
More teachers are using the LP as a repository of documents/resources for teachers	9	15	14	6	3	3
More teachers are using the LP as a repository of documents/resources for learners	8	18	12	6	3	3
More teachers are conducting online assessment via the LP	4	11	16	11	5	3
More teachers are using the LP for setting homework	5	18	14	7	3	3
More teachers are using the LP for Web 2.0 related activities (for example, Blogs, wikis, podcasting, social networking)	4	11	18	10	4	3
N = 50*						

Source: CfP Follow-up Teacher Survey 2008
A series of single response items
**A filter question; all those with access to a learning platform*

A total of 57 of the 99 teachers reported that they had access to an intranet. Further analysis suggests some evidence that these respondents reported a significantly greater impact of CfP on teachers (for example, on their ability to make more course materials available to learners and their ability to set homework that requires ICT use. See composite variables described in Section D of the Technical Report).

© Becta 2010
NOT PROTECTIVELY MARKED

5.1.4 Impact on behaviour management in class

In two case-study schools where learners had been using their mobile computers in class, the senior managers who were interviewed said that the equipment had helped to engage learners who were usually disengaged and disruptive. For example, one senior manager reported that, 'there are far less exclusions in Year 7…fewer problems…it has changed their learning completely'. One case-study school had monitored the behaviour of the target group of Year 10 learners; they were rated on a scale of A* (adds value) to E (danger of exclusion) and the proportion of A*-C ratings had significantly improved over the last 12 months. This was thought to be partly due to a change in the attitude of learners who were using PDAs provided by CfP.

5.1.5 Overall impact on teachers: further analysis

As explained in Section D of the Technical Report, a number of items that highly correlate with each other on the teacher follow-up survey were used to create a composite variable for 'impact on teachers'. Items included teachers' ability to make more course materials available to learners because of their increased access to ICT, their ability to meet the needs of learners with different learning styles, and their ability to set homework that requires ICT use. A score was developed for the variable, with zero being the minimum score for impact and 100 being the maximum. On average, the score across the 99 teachers was 50.[19] Further analysis showed that teachers who had received training to support their teaching and the extended access to ICT, or who would receive training in the future, reported a significantly greater impact of CfP on teachers than those who had not received training (see Chapter 4 for more on training and support). There is also some evidence that teachers with access to an intranet reported a significantly greater impact of CfP on teachers (see Section D of the Technical Report).

5.2 Impact on learners

5.2.1 Learners' access to ICT

Evidence from the case-study research has shown that, overall, LA representatives and school staff view CfP as a positive initiative for increasing learners' access to ICT and reducing the 'digital divide', and thus see it as contributing to its aims of giving eligible learners the same opportunities as their peers. As one LA representative said, 'I am absolutely convinced that it [CfP] has impacted on that [the 'digital divide']...in terms of that whole agenda around access to ICT and the internet...it has helped greatly'.

Findings from the follow-up learner survey also showed that 70 per cent of learners felt that having a computer to take home from school made them feel like they had the same opportunities as their friends.

[19] To explain this further, a score of 50 is equivalent to 50 per cent of teachers agreeing and 50 per cent disagreeing that CfP had an impact on teaching practice.

© Becta 2009
NOT PROTECTIVELY MARKED

It should be noted, however, that there was evidence across a small minority of schools included in the survey that not all learners identified as eligible for CfP had yet received their device or connectivity at the time of the evaluation. Moreover, there was evidence from case-study schools that a minority of parents had not collected equipment, suggesting that not all eligible learners were given the same opportunity as their peers. There were also concerns about the sustainability of access to connectivity and, therefore, the sustainability of impact on learners.

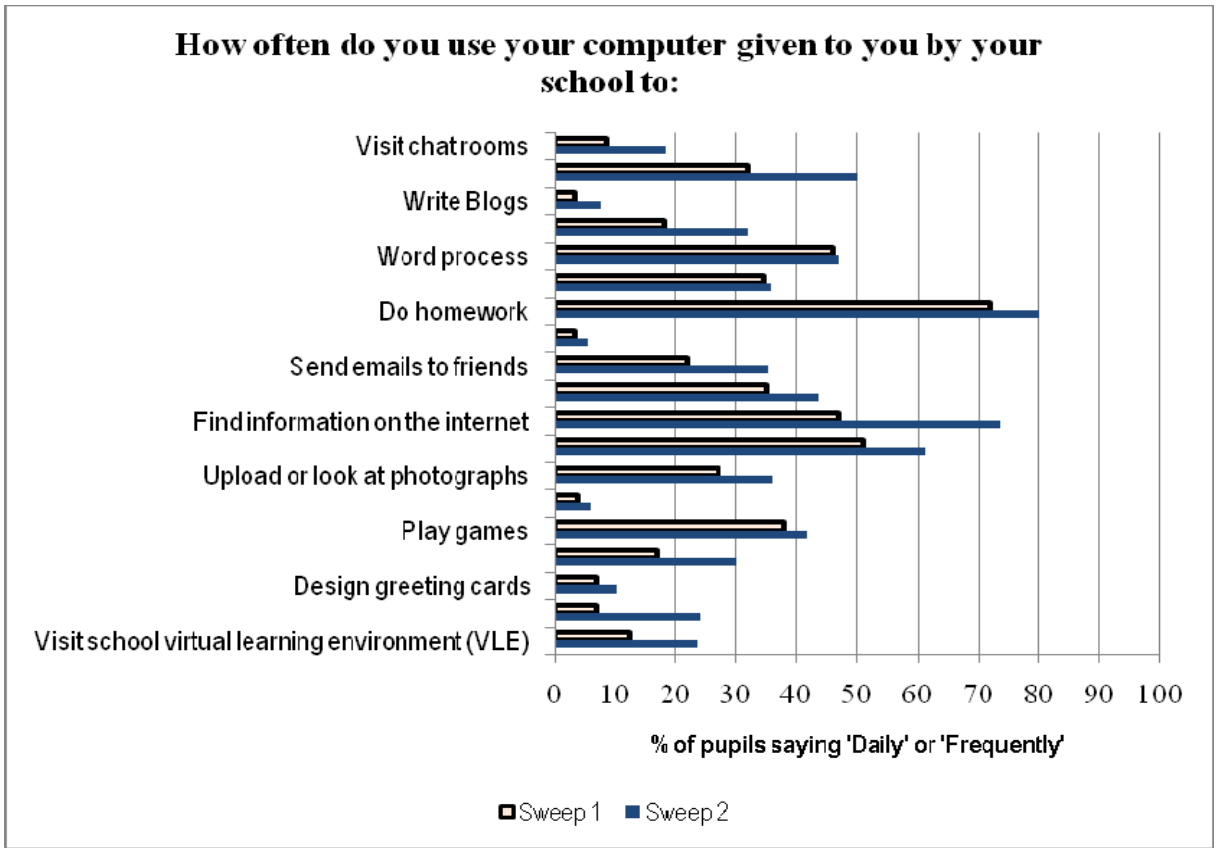
Overall, learners who had home access to technology through CfP generally reacted positively about the difference it had made to them. Parents and teachers were also positive overall about the impact on learners. The extent of impact in relation to specific skills and experiences is discussed below.

5.2.2 Learners' use of computers and the internet

At both time points of the survey (autumn 2007 and 2008), learners were asked how often they used their CfP computer for a number of activities. Figure 5.2 below shows learners' daily and frequent use of their computer at each time point. It shows that learners most often used their CfP device for schoolwork-related activities, such as homework, coursework, looking up information on the internet, and revision (the proportion of learners using their CfP device for these activities had also increased over time). The proportion of learners using their device to download video clips and upload and view photographs also increased.

© Becta 2009
NOT PROTECTIVELY MARKED

Figure 5.2 Learners' daily and frequent use of a computer



Source: CfP Baseline Learner Survey 2007 and Follow-up Learner Survey 2008
A series of single response items
Includes all learners with a CfP device in Sweeps 1 (n=200) and 2 (n=398)

It is worth noting here that, in some cases, learners' use of the internet was restricted by parents. Two-fifths (43 per cent; n=235) of parents whose children were provided with internet access via CfP had rules about the length of time their children could use the internet. As shown in Table 5.5, of those parents, 36 per cent restricted use for leisure activities (including shopping and sending email to friends) to up to one hour per day. Learners were allowed to spend more time doing school work.

© Becta 2010
NOT PROTECTIVELY MARKED

Table 5.5 Rules on internet use

Length of time per day	Leisure activities %	School work %
Up to one hour	36	14
1-2 hours	32	41
2-3 hours	9	17
3 or more hours	2	11
They are not allowed to use the internet	3	0
No response	18	16
N = 235*		

Source: CfP follow-up Parent Survey 2008
**A filter question; all those whose children were provided with connectivity and had rules about internet use in the home*
Due to rounding errors percentages may not sum to 100

5.2.3 Learners' motivation to learn

A number of questions in the survey and interviews explored the effects of CfP upon learner motivation. The findings from these questions can be summarised as follows:

- **Engagement in learning:** Having access to their own computer was thought to help learners to enjoy learning more; 84 per cent of parents, 69 per cent of learners and 69 per cent of teachers agreed that this was the case. Staff in case-study schools thought learners were more 'engaged' with their learning and 'far more active in the learning process'. One teacher thought, for example, that ICT access would motivate learners to revise for examination, and said, 'I would suggest it will be a motivating factor in terms of all sorts of revision and interactive materials for preparation for exams'. A teacher in a school using PDAs in class provided by CfP commented, 'it's another tool for engagement, without a doubt'. Indeed, three-quarters (74 per cent) of learners responding to the follow-up survey felt that access to a computer had helped them to do their revision. Learners agreed that working on their computers was 'more fun'.
- **Motivation to do homework:** Parents and teachers were asked directly about the extent to which they agreed that CfP had had a positive impact on learners' motivation to do their homework; 81 per cent of parents and three-quarters of teachers agreed that this was the case. Indeed, 83 per cent of learners reported that having their own computer had helped them to do their homework.
- **Motivation to work hard in lessons:** Sixty-five per cent of parents agreed that access to a computer had motivated their child to work hard in lessons, but only two-fifths of the teachers did so (this is likely to be

© Becta 2010
NOT PROTECTIVELY MARKED

because most learners were not using their devices in lessons). Most other parents and teachers were neutral; only a minority disagreed. Three-quarters (73 per cent) of learners felt that access to a computer made it easier to learn.

- **Motivation to go to school:** A hypothesis might be to expect that receipt of a free computer has a positive impact on learners' attitudes and behaviour, and thus those who had received a computer in autumn 2007 would subsequently have significantly lower absence rates in spring 2008 than other groups of learners[20]. As shown in detail in Appendix C, learners who had received a computer in autumn 2007 did indeed have lower absence rates than other groups of learners. It should also be noted, however, that this same group of learners also had substantially lower absence rates in the year prior to receiving a free computer. As such, there is little evidence to suggest that receiving a computer has had an impact on their levels of absence. However, the survey findings suggest that CfP had some impact on learners' motivation to go to school; just over half of parents and teachers thought this was the case.

5.2.4 Learners' development of new skills

There is strong evidence that CfP has been meeting its aim of encouraging the development of new skills among learners. Eighty per cent of learners thought that having access to their own computer had helped them to be better at using computers (even higher proportions of parents and teachers thought learners had improved their computer skills). Small minorities disagreed that this was the case. There was a general perception among case-study schools that by having their own computers, learners' ICT skills had improved; teachers mentioned learners' confidence and competence in using ICT (for example, when using packages to prepare presentations). Three-quarters of teachers who responded to the survey also felt that learners were more confident about their learning.

There were comments in case-study schools from learners who thought that their keyboard/typing skills had improved, 'I was slower but now I'm faster because I've got used to where the keys are'. Access to the internet was also thought to have improved learners' research skills. One teacher said, 'They are learning to use the internet more wisely. Some of them are getting quite adept at searching the internet...as they move up the school, as research becomes more important, certainly in Years 10 and 11, they will benefit from that'. One parent commented that their child was coming on 'leaps and bounds'.

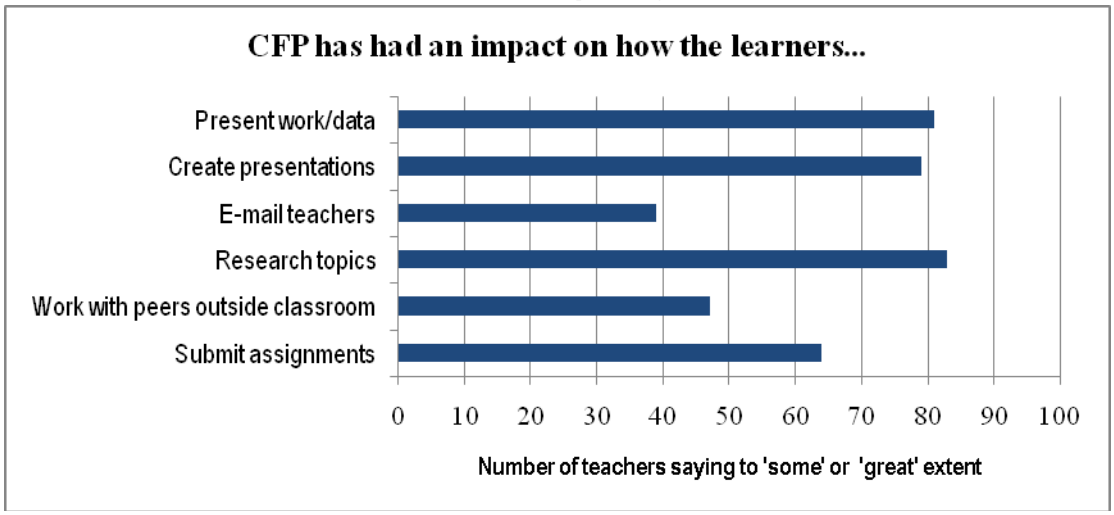
[20] Other groups of learners include: all learners who indicated that they had received a computer later than autumn 2007; other learners identified as being involved in the initiative (it should be noted that the majority of these learners did not return a questionnaire and so it is not known whether or when they received a computer, although it is considered unlikely that many of these pupils had received a computer by the end of autumn 2007); learners in the same schools who had not been identified as being part of the programme; and learners in other schools.

© Becta 2009
NOT PROTECTIVELY MARKED

5.2.5 Learners' improvements in quality of work

Most of the teachers who responded to the follow-up survey (80 out of 99) felt that having a computer had helped learners to improve the general quality of their work. Similarly, three-quarters of learners (73 per cent) reported that the increased access had helped them to better present work. As shown in Figure 5.3 below, 81 of the 99 teachers felt that having a computer had had an impact on how learners present written work/data (27 to a great extent and 54 to some extent) and 79 teachers felt that there had been an impact on how learners create visual presentations (16 to a great extent and 63 to some extent).

Figure 5.3 Teachers' views on learners' quality of work



Source: CfP Follow-up Teacher Survey 2008 (n=99)
A series of single response items

There was also a general perception among teachers in case-study schools that ICT use had improved the quality of learners' work. Staff comments included, 'In terms of the quality of the work they are able to produce, there is no doubt it is far superior...these days pupils expect multimedia and a polished finished product'.

Indeed, one senior manager said that the local senior adviser for English was 'gobsmacked' at the quality of work produced by Year 10 learners using PDAs. Learners in case-study schools agreed that the quality of their work was better. For example, one said, 'the quality of my work is a higher standard now, because you don't have to rush anymore'. In case-study schools, learners with CfP computers were reported to have a sense of pride. As one teacher said, 'They want to show me their work and what they have done. They're taking pride in their work and are motivated'.

5.2.6 Learners' achievement/attainment

An initial aim of the research was to conduct an analysis of the National Pupil Database (NPD) to explore the impact of CfP on attainment at Key Stages 3 and 4 of learners who had received a CfP computer in 2007/08. However, of those learners

© Becta 2009
NOT PROTECTIVELY MARKED

matched to NPD who had indicated having received a computer (at all), only 81 were in Year 9 and only six were in Year 11 in 2007/08. For this reason, further analysis of 2008 attainment data was not considered a valid exercise.

Analysis of the follow-up surveys, however, revealed that two-thirds of the teachers (64 of the 99 teachers) felt that having a computer at home had helped learners to do well at school; most of the others (29) were neutral, and only a small minority disagreed. Parents were even more positive, with 75 per cent agreeing that their child was now more able to do well at school. Among the 398 learners with a CfP device who responded to the follow-up survey, 68 per cent felt the device had helped them get better grades (again, most others were neutral rather than negative).

Interviewees in three case-study LAs also reported perceptions that CfP had contributed to higher achievement among learners. A school senior manager commented, 'We had the highest ever results last year, but it's probably a coincidence...I would say that one particular Year 10 top set who were using them [PDAs] in every lesson, went from low 30 per cent of pupils getting one or more A or A* to 42 per cent...it is likely to be something to do with the PDAs'.

A senior manager at a different school noted, 'CfP is not the only factor...but certainly those kids who have used their PDAs regularly are kids who have made significant gains at GCSE'.

An LA representative said, '[The LA] achieved the best ever GCSE results last summer, and I would like to think that disadvantaged kids having access [to ICT] at home contributed in some way to that success...you couldn't attribute it all to Computers for Pupils, but I'd like to think it played a part'.

Another LA representative noted, 'It is one of the LA's priorities to raise attainment and CfP is seen as a good way to target those most in need'.

In case-study schools where CfP computers had been used in particular lessons, such as English and Media Studies, teachers felt that this was having an impact on learners' achievements. Teachers in one case-study school felt that high achievers had 'absolutely flown with it' and that learners with special educational needs (SEN) had also benefited. Other specific examples were given, including one teacher's comment, 'A few of my merit students have moved up to distinction, because it has given them the confidence and they're getting stuck in'.

Among case-study schools where numbers of learners benefiting from CfP were small, or where they were scattered across the school, it was thought unlikely that CfP would have an impact on achievement across the school.

5.2.7 Learners' access to information and use of a learning platform

Of the 99 teachers who responded to the follow-up survey, 83 felt that having access to ICT equipment had helped learners to research topics on the internet (40 said to a great extent, whereas 43 said to some extent).

© Becta 2009
NOT PROTECTIVELY MARKED

Among case-study schools, CfP was perceived to have given learners access to a wealth of varied information that would not have been available beforehand. This access not only related to information available on the internet, but also to resources, materials and presentations that had been uploaded to learners' devices. Learners in case-study schools appreciated that their computers gave them increased access to information. Comments included, 'It's easier to find out information' and'[I have] more freedom, as you can access things you weren't able to before'.

The follow-up surveys explored the extent to which learners were using a school learning platform or website (see Table 5.6 below). As discussed previously, a learning platform could offer learners access to stored work and e-learning resources and support personalised learning. Table 5.6 shows that learners who had a CfP device were likely to use a learning platform to find out about or complete either homework or coursework. One-fifth of learners with a CfP device were also accessing learning resources fairly regularly. However, there is scope for more use of such facilities to further support personalised learning.

© Becta 2009
NOT PROTECTIVELY MARKED

Table 5.6 Learners' views on their use of a learning platform

Frequency of use of school learning platform or website	Daily %	Frequently %	Occasionally %	Never %	NR %
To find out about, or to complete, homework	18	21	19	29	13
To find out about, or to complete, coursework	11	19	16	38	15
To access your online learning space (virtual learning environment)	7	15	26	42	10
To use blogs, wikis or social networking	6	8	14	56	16
To access learning resources, for example, worksheets, lesson plans	5	17	22	40	15
To communicate with other learners	5	9	16	53	17
To access marks or test results	4	9	16	56	16
To communicate with teachers	2	4	11	67	16
Overall, how often do your parents/carers use the learning platform	2	10	25	47	16
N = 398*					

Source: CfP Follow-up Learner Survey 2008
A series of single response items
**A filter question; all learners with a CfP device*
Due to rounding percentages may not sum to 100

There was evidence from the teacher survey and case-study research that access to such facilities was still being developed in many cases, thus restricting the potential opportunity for learners to make use of a learning platform. Moreover, teachers in case-study schools felt that the benefits of learning platforms for learners would be restricted once the CfP funding for internet connectivity ceased after one-year. During follow-up case-study interviews, teachers explained that they were looking for ways to fund an extension of learners' access to connectivity, although some were concerned about long-term sustainability. Comments included, 'I think connectivity may well disappear. When we get to next summer there will be some scrabbling around to find money...to see if we can fund it ourselves, but there are doubts about

© Becta 2010
NOT PROTECTIVELY MARKED

that'. Another teacher commented, 'I worry that, in the current economic climate, will families be able to provide their own internet connectivity...I have my doubts about that'.

The continuation of connectivity will therefore have an impact on learners' ability to access information via learning platforms (and the internet) from home in future. Moreover, the evidence reported in Chapter 3 shows that not all learners who were supplied with a CfP computer received connectivity via the initiative, thus restricting their ability to access the learning platform.

5.2.8 Learners' independence/personalising learning

The previous section emphasised the scope for more learning platform use to support personalised learning, although there is other evidence to suggest that CfP is meeting its aim to support personalising learning in other ways. For example, most parents (81 per cent) who responded to the follow-up survey felt that having a computer had helped their children to work at their own pace. Similarly, 61 of the 99 teachers thought this was the case. Two-thirds of learners (67 per cent) reported that having access to their own computer had enabled them to do their homework when they like.

In case-study schools, teachers made comments about computer and internet access having enabled learners to personalise their learning. Learners themselves appreciated that having their own computer allowed them to work at their own pace. Comments included, 'you don't feel the pressure to do your work all at once and can space it over time' and 'at home I can just go and do it myself and not rush myself'. One parent remarked, 'it's a brilliant way for them to become more responsible for their learning'.

Among the 398 learners with a CfP device, 89 per cent felt that they had enough quiet space at home to use their computer; most of them (69 per cent) used their device in their bedroom.

5.2.9 Learners' communication with others

Within case-study schools, it was rare for there to be much communication between teachers and learners or parents via email. Thus, it is perhaps not surprising that the survey findings revealed that only 15 per cent of learners reported that having their own computer had helped them to send email to teachers from home (53 per cent disagreed and most others were neutral). Among the 99 teachers who responded to the survey, 36 felt that CfP had had an impact on how learners use email to contact teachers to some extent, but 39 reported that there had been no impact (only three said to a great extent).

Learners were more likely to report an impact on the ability to send email to friends from home (45 per cent agreed). Similarly, 61 per cent of parents and around half of the teachers felt that having a computer at home had helped learners to keep in

© Becta 2009
NOT PROTECTIVELY MARKED

touch with friends. A few teachers in case-study schools specifically said that because the 'digital divide' between learners in class had been reduced, they felt that it had opened up communication between them, and they could talk about their experiences of the same ICT-related activities (such as messaging or accessing the same websites/social network sites). As one teacher said, 'It gives them [learners] a sense of belonging to the rest of the group. I know there are quite a few kids now who are chatting to each other'.

5.2.10 Overall impact on learners: further analysis

As explained in Section D of the Technical Report, a number of items that highly correlated with each other on the teacher follow-up survey were used to create a composite variable for 'impact of CfP on learners'. The items included whether teachers felt CfP had helped learners to enjoy learning, be motivated to learn and go to school, and improve their computer skills. A score was developed, with zero being the minimum score for impact and 100 being the maximum. Across the 99 responding teachers, the average score for 'impact on learners' was calculated to be 71, which suggests a positive impact of the initiative.[21]

Another composite variable was created for 'impact on things learners can do', which included tasks such as presenting written work, creating visual presentations, and researching topics on the internet. The average score from teachers in this case was slightly lower (a score of 56). When the type of device was taken into account, teachers' scores for learners with laptops were significantly higher on average than their scores for learners with PCs.[22]

Based on items from the learner follow-up survey, a composite variable for 'extent CfP computer had helped' was created (including help to present work better, enjoy learning more and find it easier to learn). Learners' average score was 68, suggesting that CfP had had a positive impact on learners. Those who did not have internet access at home prior to the CfP initiative reported a greater impact overall. This was also reflected in the multilevel modelling analysis (see the Technical Report), which revealed that learners who reported that they had received internet access via the initiative were more likely than similar learners who had not received internet access as part of the programme, or those who had already had access prior to CfP, to think that the CfP computer had helped them.

Similarly, parents who reported that their child had not been supplied with internet access had significantly lower scores for the extent to which the CfP computer had helped their child or themselves, compared with other groups (including those who thought internet access would be supplied in future and where it is not required).

[21] To explain the scoring further, a score of 71 is equivalent to 71 per cent of teachers agreeing to a statement and 29 per cent disagreeing. For example, a typical response to an item included in the composite variable score for 'impact of CfP on learners' included 73 per cent of teachers who strongly agreed or agreed that having a CfP computer had helped learners to be motivated to do their homework.

[22] The numbers of teachers saying learners had received an UMPC or a PDA (three and none respectively) were too small, so the analysis was restricted to comparing impact of PCs and laptops.

© Becta 2009
NOT PROTECTIVELY MARKED

Perhaps not surprisingly, learners who reported that their computer 'never works' were least positive about the extent to which CfP had helped them (although numbers were very small).

As would be expected given the CfP eligibility criteria, the responding learner sample included learners from more deprived areas than average.[23] Multilevel modelling (described in Section D of the Technical Report) revealed that learners from deprived areas tended to make more use of their computer and be more likely to think that the computer had helped them, compared with similar learners from more affluent areas (see footnote for information on deprivation). This suggests that CfP has had most impact on the intended target group.

5.3 Impact on parents and families

The CfP initiative aims to develop ICT skills among families, as well as selected learners. Among the 398 learners who had received a device at the time of the autumn 2008 follow-up survey, 68 per cent said that someone else used their device. Of those, 73 per cent said it was used by their siblings and 61 per cent by their parents or carers.

[23] Census data was used to produce a measure of deprivation. It is a continuous measure developed from a number of statistics related to the ward that a learner lives in. Principally, it is based on the percentage of people who are unemployed, the percentage who are in routine jobs and the percentage who are not in good health. It is scaled so that nationally the average is 100 and the standard deviation is 15. In the follow-up learner survey responding sample, the average was 114, meaning that the sample is from more deprived areas than average (which is to be expected given the CfP eligibility criteria). It should be noted that this measure is about the area in which a learner lives, not the learner themselves; particular learners might come from a deprived family that happens to live in an area of high employment (where most people are in skilled occupations). However, the analysis showed that learners from areas where there were the highest unemployment levels and fewest people in skilled jobs tended to use their computer more than those from less deprived areas.

© Becta 2009
NOT PROTECTIVELY MARKED

Table 5.7 Learners' views on who else uses their device

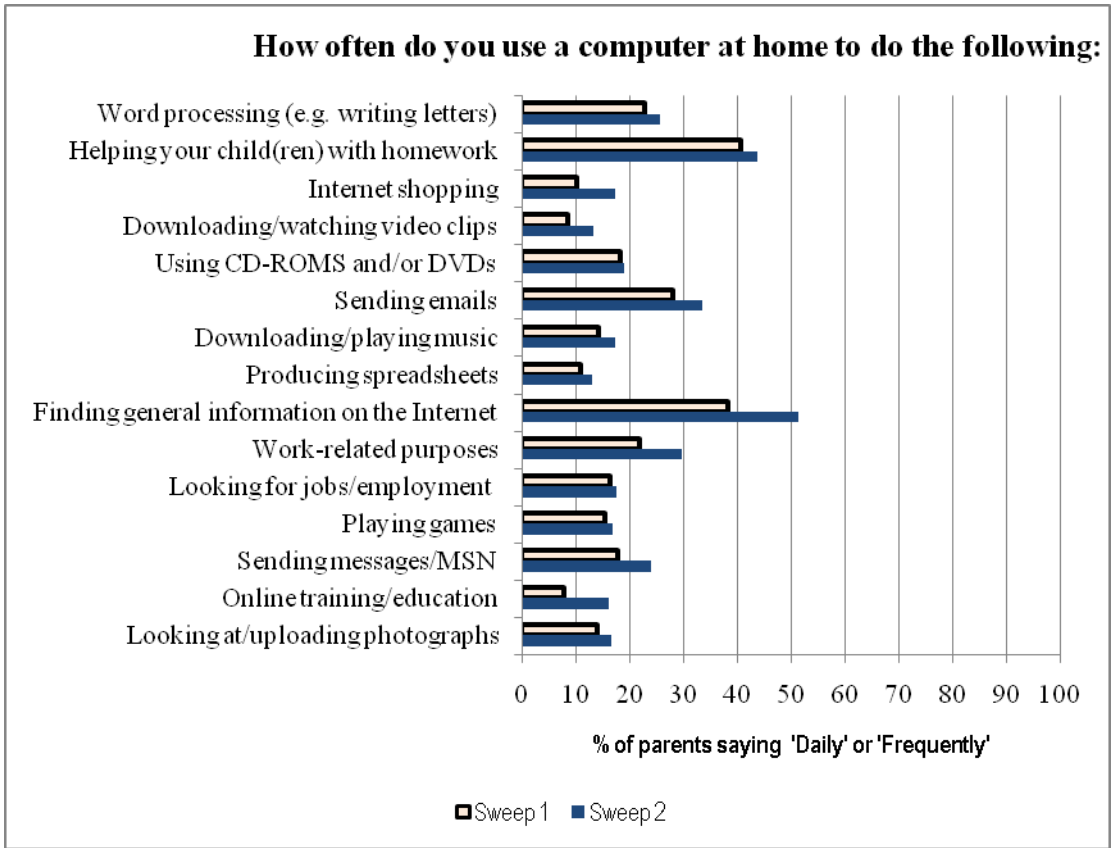
Users of the device	%
My brothers and sisters	73
My parents or carers	61
Other people in my family, for example, grandparents, aunts, uncles	20
My friends	18
Other	4
N = 271*	

Source: CfP Follow-up Learner Survey 2008
A multiple response question
**A filter question; all learners who said someone else uses their CfP device*
Due to rounding percentages may not sum to 100

At both time points of the survey (autumn 2007 and 2008), parents were asked how often they used a computer for certain activities. Figure 5.4 shows the difference in the proportions of parents doing things 'daily' and 'frequently' at each time point. Although the differences are not substantial, it seems that parents were slightly more likely, by autumn 2008, to do all of the activities either daily or frequently, particularly shop on the internet, watch video clips, download music, find general information on the internet, use a computer for work-related purposes and access online courses. It should also be noted that there were some increases in occasional use of computers, particularly in relation to word processing, internet shopping, sending emails, producing spreadsheets, looking for jobs, and looking at photographs. It is likely that increased access for some parents via CfP has contributed to these increases in computer use.

© Becta 2010
NOT PROTECTIVELY MARKED

Figure 5.4 Parents' daily/frequent use of a computer



Source: CfP Parent Surveys2007 and 2008
Multiple response questions

It was least likely for parents of children with a device to report using the device themselves for social activities such as shopping online (22 per cent), for making friends online (20 per cent), or for keeping in touch with other parents (19 per cent).

5.3.1 Parents' access to information

As shown in Table 5.8 below, approximately two-thirds of parents with children who had a CfP device reported that it would be useful for them to access information on their child's school website and to find out about their child's lessons and homework. Approximately half of parents also felt that the device would be useful to find out about how their child is getting on at school or about their attendance at school. Two-fifths would find it useful to find out information about employment opportunities.

© Becta 2010
NOT PROTECTIVELY MARKED

Table 5.8 Parents' views on impact on accessing information

Useful for me to ….	Strongly agree %	Agree %	Neither agree nor disagree %	Disagree %	Strongly disagree %	NR %
Get information from my child's school website	23	41	20	8	2	6
Find out about my child's lessons and homework	24	41	20	10	2	5
Find out information on my child's attendance	17	30	28	14	4	6
Find out about how my child is getting on at school	22	29	28	12	3	7
Find information about employment opportunities	13	28	28	11	10	9
N = 322*						

Source: CfP Follow-up Parent Survey 2008
A series of single response items
**A filter question; all parents who said their child had received a CfP device*
Due to rounding percentages may not sum to 100

The parent surveys asked, 'to what extent do you agree that your child having a computer to bring home will be useful for you in the following ways'. This does not ascertain the extent to which they were in fact doing this type of activity. However, when parents of children with a CfP device were asked specifically about their use of a school learning platform, only a quarter (25 per cent) said that their child's school had one; most (57 per cent) were not sure, and some (13 per cent) did not think one existed. Thus, the information above suggests that more parents would find it useful to be able to access certain information than those who are actually able to do so via a learning platform. Moreover, even those who were aware of a learning platform were not using it to a great extent (see Table 5.9 below). This could imply that parents would welcome information and support to enable them to access such information.

© Becta 2010
NOT PROTECTIVELY MARKED

Table 5.9 Parents' use of the learning platform

Parental use of the learning platform	Daily %	Frequently %	Occasionally %	Never %	NR %
To obtain information about the school (e.g. term dates, uniform, subjects offered, newsletter)	9	18	24	39	10
To communicate with teachers	5	9	15	62	10
To access your child's marks or test results	5	13	17	52	12
To access your child's online learning space	7	12	15	52	13
To find out about your child's homework	12	17	16	45	10
To find out about your child's coursework	7	18	12	51	11
N = 82*					

Source: CfP Follow-up Parent Survey 2008
A series of single response items
**A filter question; all parents of children with a CfP device who were aware of a learning platform*
Due to rounding percentages may not sum to 100

5.3.2 Parents' development of skills

There was evidence that CfP has made progress towards meeting its aim of encouraging the development of ICT skills among families. More than half (59 per cent) of the parents of children who had a device at home thought that the device was useful in terms of enabling them to use a computer more than they did. The same proportion thought it was useful to improve their own computer skills; 18 per cent were neutral and 14 per cent disagreed (others did not respond). As one learner commented about their parent, 'before, she didn't even go on the right things…she barely knew how to put the internet on'. Just under a third of parents (30 per cent) thought that the device was useful for them to take part in online training courses.

5.3.3 Parents' involvement in their child's learning

Almost three-quarters (73 per cent) of parents of children with a device felt that it enabled them to be more involved in their child's homework/learning; 15 per cent were neutral, six per cent disagreed and the others did not respond. As noted previously, 15 per cent of parents said that they used the CfP device to help their child with their homework daily; a further 29 per cent said they did so frequently.

© Becta 2009
NOT PROTECTIVELY MARKED

5.3.4 Parents' extent of computer use overall: further analysis

Using a number of related items on the parent follow-up survey, a composite variable and score was created for 'extent of parents' use of computers' (a score of zero would indicate minimum use, whereas 100 would indicate maximum use). Items included using computers to get information from the school's website about their child's lessons/homework, attendance and progress; to improve their own computer skills; and to be more involved in their child's learning. The average score overall for extent of parents' use was 59. Analysis showed that parents who had received training in four or more of the seven training areas listed in the survey had significantly higher scores in terms of extent of use of a CfP computer compared with parents who received less training or none at all. Receiving training was also associated with higher levels of parental confidence in completing particular ICT-related tasks, such as using a word processor, communicating by email and helping their child with homework.

© Becta 2009
NOT PROTECTIVELY MARKED

6. Key messages and implications

This chapter summarises the key findings in relation to the extent to which the CfP initiative has met its aims and draws out implications that may be useful for informing the Home Access programme and other ICT-related initiatives.

6.1 Key findings in relation to the aims of CfP

The Computers for Pupils initiative, launched in 2006, provided schools in deprived areas with funding to invest in home access to ICT for their neediest learners, in order to: give eligible learners the same opportunities as their peers; contribute to raising educational achievement; support personalised learning; and encourage the development of ICT skills among learners and families. Key messages in relation to these aims are given below.

Giving eligible learners the same learning opportunities as their peers

The evidence from the evaluation suggests that the learners who had benefited most from CfP were those most in need (those previously without connectivity and those in the most deprived areas). The CfP initiative was praised for helping to reduce the 'digital divide', and most learners who had received a CfP device clearly felt that it had made them feel like they had the same opportunities as their peers.

In a minority of case-study schools, however, particular groups of learners (such as the Year 7 cohort) were targeted in order to cluster those benefiting within a school, which raises a question about whether they were all eligible. There also were schools in which a minority of parents opted out. In addition, a question emerged about the sustainability of any reduction in the 'digital divide' once the funding for connectivity ceased (if schools could not extend the funding period using other budgets). All of this indicates that the selection of learners is of crucial importance, and thought needs to be given to whether selection should be targeted or universal. If universal home access is the aim of future initiatives, how can it be ensured that this is actually achieved?

Providing conditions that contribute to raising educational achievement

Teachers, learners and parents perceived that CfP had helped learners to do well at school and to get better grades. Some particularly positive comments were made in case-study schools where learners used their device in class as well as at home. There was also evidence that access to ICT had acted as a tool for engagement in learning and motivation to learn in general. Some evidence also suggested that the use of devices in class had a positive impact on the behaviour of learners.

Supporting personalising of and independence in learning

There was evidence to suggest that teachers were able to meet the needs of learners with different learning styles because of CfP, and that the initiative had

© Becta 2010
NOT PROTECTIVELY MARKED

helped learners to work independently, at their own pace, when they liked, and in their own quiet space. There was more scope for raising awareness of and use of learning platforms, which, in turn, could further support personalising learning.

Encouraging the development of ICT skills among learners and families

Evidence suggested that the increased access to technology CfP provided had helped learners to develop the confidence and competence to use computers more in general. There was also evidence that learners had developed specific skills such as keyboarding/typing, research, and using particular software or functions of their devices. These skills had led to improvements in the presentation quality of written work and the standard of visual presentations. There was also evidence of parents having developed their own computer skills and becoming more involved in their child's homework/learning. Those who had received training/advice from the school were most positive about their confidence using the device.

Contributing to changes in teaching and learning

Although not a specific aim of CfP, it was anticipated that the initiative could have an impact on teaching and learning practices. Such impact seemed to depend on a number of factors, including the schools' organisation of CfP, the numbers of learners involved in a school, the clustering of selected learners within schools/classes, and learners' access to connectivity. There was clear evidence that CfP had enabled teachers to set more ICT-related homework and make more course materials available for learners to access at home. There was also evidence, particularly in case-study schools, of CfP's impact on in-class practice when devices were used in class. As the initiative intended, however, most use of CfP devices occurred at home. Teachers who had received training to support their teaching reported the most impact of CfP on teaching practice.

6.2 Key messages and implications for future initiatives

This section summarises key messages and implications for Becta and policy-makers, who may be involved in implementing similar initiatives in the future.

Timing

One key lesson from the CfP evaluation has been that it is important to allow sufficient time for LAs and schools to plan and implement any ICT initiative involving home access. The process required between announcing an initiative and actually getting devices into the hands of learners (and into homes) is complex and requires some difficult decision-making by LAs and schools. Inevitably, the process was reported to be smoother for the second year of CfP as lessons had been learned, systems had been put in place and links with suppliers had been developed in the first year. However, lead-in time between the announcement of a programme and the deadline for spending grants needs to be sufficient to allow for this process, particularly in the first year of any new initiative.

© Becta 2009
NOT PROTECTIVELY MARKED

Administrative support

Clearly, LA representatives and school staff had experienced workload pressures when implementing CfP, particularly at the outset of the initiative. Implementation issues had eased over time, particularly when spending funds in the second year, as lessons had been learned during the first year. There were on-going demands on school senior managers and technical staff, as parents and learners often sought support directly from schools.

The consensus was that the effort was worth the benefits that were reaped as a result, but funding (or clarity about funding) to support administration would have been welcomed. It did not seem that those interviewed were making use of the School Development Grant 101 for ICT management purposes to support CfP (none referred to it and many expressed concerns about a lack of funds), which could be because they were not aware that they could use the funds for CfP (although the guidance does make this clear) or because they felt that it was not a sufficient amount of money to support the initiative as well as other activities.

The importance of connectivity for impact

CfP funding was made available to provide safe internet access for eligible learners. Indeed, learners who previously lacked internet access at home and received it via CfP tended to report greater impact of the initiative overall, compared with other learners. It seems that 'new' access to the internet genuinely opened up new opportunities for these learners.

Some challenges were faced in providing access for all eligible learners, including finding a quality, cost-effective solution within the allocated budget and accessing homes to supply the internet via home telephone lines. The most successful option seemed to be providing mobile internet, which was effective in terms of providing instant access in any location, but also particularly cost-effective when purchased for large numbers of learners. This option was adopted by more LAs in the second year of procurement when prices had lowered. Moreover, in Year 2, capital funding (rather than revenue funding) could be used for connectivity if purchased through the Becta mini-competition, which may have helped to solve funding challenges faced in Year 1.

Some eligible learners, albeit across a small number of schools, had still not been provided with connectivity at the time of the follow-up survey (autumn 2008), two years after the initiative's launch. Some parents did not expect their child to receive connectivity at all (39 per cent, although it should be noted that 15 percent of parents said they did not require it). Internet access has implications for maximising the impact for learners, given the relationship found between access and impact. The ideal would be to provide both devices and internet connectivity for all learners. The finding that most uses of the CfP devices seemed to require internet access emphasises the importance of connectivity. For example, teachers were setting more

© Becta 2009
NOT PROTECTIVELY MARKED

ICT-related homework involving internet research and the most frequent activity learners reported was looking up information on the internet. Moreover, access to a learning platform gave learners further opportunities for personalising their learning, which could be restricted without internet access at home.

Some case-study schools had already found additional funding sources to extend the length of time learners had connectivity, but others were still worried about being able to sustain that funding. Others did not think they would be able to support connectivity at all and were concerned that parents would not be able to afford to pay for it themselves. The overall clear message is that funding for connectivity is likely to be crucial in order to sustain the impact of any home access schemes in the future.

Accessing and supporting parents

There was evidence across case-study schools that a minority of parents had declined the opportunity to be involved in the initiative, even in schools that made strenuous effort to convince them of the advantages of CfP. Speculation among teachers who were interviewed suggested that the reasons were that parents either already had access in the home, or that they were sceptical about the 'catch' of being given a free computer. There were also reports that particular parents simply did not wish to engage with schools for whatever reason.

Clearly, thought needs to be given to how to access all parents in order to maximise home computer provision in the future. The evidence from the CfP evaluation suggests that parents often look to the school to support them in their involvement in such an initiative. For example, when parents were offered technical support from suppliers, school staff reported that some parents started to feel more comfortable seeking this support from the school. Moreover, case-study interviewees had frequently provided support with administration when parents lacked confidence, such as with insurance claims if a device had broken. These findings suggest that some form of support should be available for parents if required to maximise the impact of home access schemes. Careful thought should be given to the level of support provided, who supplies such support, and how it would be funded. Thought also would need to be given to how the initiative is 'advertised' to parents to ensure that they clearly understand the aims and benefits and to address any concerns about a 'catch'.

The usefulness of training

Teachers who had received training to support them in maximising the benefits of increased ICT access reported a significantly greater impact of CfP on teaching practices than those who had not received training. These findings emphasise the usefulness of training for teachers to maximise the impact of home access initiatives, although there may be time and resource implications. Provision of training from external organisations, including a CLC, had been well received.

© Becta 2009
NOT PROTECTIVELY MARKED

Similarly, there were positive links between how much training parents had received as a result of CfP (for example, training on setting up the device, using email, supporting their child's learning, and using software) and the extent to which they used the CfP device and their level of confidence in completing particular ICT-related tasks. In the majority of case-study schools, most parents had attended an event during which computers had been distributed. Schools had the opportunity at these events to inform parents of issues such as internet safety, as well as show parents and learners how to use the device to maximise learning and the development of ICT skills.

A minority of case-study schools had also offered additional support and training for parents, but attendance was reportedly low, suggesting that parents were most likely to attend the event when the computers were being distributed. Also, some case-study schools distributed devices directly to homes and did not have any opportunity to meet with parents face-to-face. Although the majority of parents reported that they were very or fairly confident at using computers, the evidence suggests that those who had received specific training and advice resulting from CfP reported the most impact. The best way of creating opportunities to provide advice and training to parents, preferably face-to-face, should therefore be considered in order to maximise the impact of any future home access initiatives.

Overall, there was support across participating LAs and schools for the principles and goals of the CfP initiative. The evaluation produced evidence that the initiative was being implemented with the appropriate target group of the most deprived learners (with a few exceptions), and that these learners were indeed benefiting in terms of motivation and skills acquired, and also in terms of perceived improvements in educational attainment. There is also reasonably strong evidence that teaching practice was beginning to change to make better use of learners' access to the technology, especially in schools where there had been training support for teachers. Evidence also suggests that parents could be motivated through home access to become more involved in their children's education.

Most of the challenges encountered in the two years of the CfP initiative evaluated here arose from logistical, practical and planning issues. The consensus was that any challenges were worth overcoming to reap the benefits of the increased access to technology for learning at home that CfP gave learners and their families.

© Becta 2009
NOT PROTECTIVELY MARKED

References

Becta (2009), *Harnessing Next Generation Learning: Children, Schools and Families Implementation Plan 2009-2012*, Becta p.19.

Department for Education and Skills (DfES) (2006), *Computers for Pupils 2006-08, Guidance for LAs and Schools (Support Pack)*, Viglen, p.4. www.viglen.co.uk/viglen/Attachments/ComputerforPupils60mGuidanceDocv2.pdf

Knight, J, (2008), DfES, BETT Speech, London. www.dfes.gov.uk/speeches/speech.cfm?SpeechID=742

Smith, P, Rudd, P and Coghlan, M (2008), *Harnessing Technology: Schools Survey 2008,* Becta. http://partners.becta.org.uk/index.php?section=rh&catcode=_re_rp_02&rid=15952

© Becta 2009
NOT PROTECTIVELY MARKED