Children and the internet:

A workshop report and policy recommendations

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Introduction

In today's communications world being connected is becoming central to how we relate to each other and the world at large. The Ofcom Consumer Panel takes the issues that surround digital exclusion very seriously and we have been working with government and stakeholders to devise policy solutions that help close the divide. Last year, we published an attitudinal research report into older people's connectivity[1], and in 2007 we have focused our research on children from low-income households. A copy of the Consumer Panel's research, as well as a link to a film made to explore the attitudes of children who have the internet at home, can be found on the Ofcom Consumer Panel's website[2].

The current generation of children are growing up within a communications revolution and it is having a profound affect on those who are connected. Children are immersed in the digital world, using it as extensions of their personality and to socialise with friends and meet new people. Those without the internet at home feel they are disadvantaged by not having it.

Consequently, the Ofcom Consumer Panel wished to identify and understand the reasons why this group have not connected. The research suggests that there is a series of complex parental attitudinal barriers - and while cost plays a part there are other fears to overcome. Some of these are: a parents' fear that they will not be able to understand or control the computer; a fear of being left out and isolated within the family; and a fear that unsuitable content will start to enter their home.

The Consumer Panel's research into children and the internet sits in the wider context of the government's digital strategy, and the work being done at national and local levels to promote digital inclusion. We convened a workshop in London on 28 June 2007 to bring together key representatives who work in this area - from government, think-tanks, the third-sector and industry.

The workshop sought to understand how parental concerns can be addressed and other barriers to internet access can be overcome. By discussing the solutions and lessons learnt by those implementing programmes on the ground, the workshop aimed to help shape policy recommendations to close the digital divide in this area.

As well as a presentation of the Consumer Panel's research[3] the workshop also heard from several speakers alongside a round table discussion involving all participants. Links to the presentations can be found below, followed by a distillation of the themes that arose during the workshop.

[1] www.ofcomconsumerpanel.org.uk/files/information/olderpeople/Older_people_and_communications_technology.pdf
[2] www.ofcomconsumerpanel.org.uk/information/research-policy.htm#Children
[3] www.ofcomconsumerpanel.org.uk/information/documents/AbbyJones.pdf

Presentations

Colin Penfold, Assistant Director, Learning and Teaching, Becta (British Educational Communications and Technology Agency)
Home Access: National Policy - Finding Solutions

Dave Brodie, Headmaster of Prince Albert Junior and Infant School
Aston Pride's *Computers in the home* - the successes and challenges of putting computers into low-income homes

Brian Durrant, Chief Executive, London Grid for Learning
Rolling out *Computers for Pupils* across London

Themes of discussion

Why provide home internet access for children?

Social inclusion - children

The Consumer Panel's research found that internet access plays a role in social inclusion and that children from low-income households are further disadvantaged when they do not have home internet access. As well as supporting better social communication and inclusion, providing internet access is also about letting children develop life-skills that will equip them as they enter the workforce.

Social inclusion - other family members

Projects that provide home internet access for children have the positive consequence of introducing their parents to a PC and the internet. There were examples of adults using the internet to connect socially, in the case of a mother playing online bingo, or of parents from ethnic minorities using their new computers to improve their English. Some projects established 'communities' in which parents were able to support each other as they learned about Information and Communications Technologies (ICT).

Raising educational attainment

ICT can transform people's learning, both at school and beyond the school gate, and there is evidence that it contributes to positive differentials in academic attainment. The recent Becta report[4] evaluating the ICT Test Bed Project, and the experiences of many schools, including that of workshop speaker Dave Brodie, Headmaster of Prince Albert Junior and Infant School which hosts Aston Pride's *Computers in the home* project, revealed that integrating such technology into learning raises educational attainment. These improvements were seen in improved test results and a change in pupil's homework practices. Pupils returned more homework, did it more willingly, and went beyond what was required. There was also an increased engagement of parents with their child's education. For instance, it was easier for schools to share their assessment information of pupils with parents. This has an added benefit of allowing parents to view

[4] www.evaluation.icttestbed.org.uk/files/test_bed_evaluation_report_2006.pdf

the progress of their children throughout the year - not just through occasional written reports and parents' evenings.

Schools attributed the improved academic attainment to the use of ICT within schools, but also to increased home PC and internet access, which enables out-of-hours learning. The Consumer Panel research found that the educational benefits of home internet access were perceived by all children and most parents. The exceptions were the fearful parents who, for various reasons, were resistant to having the internet in their homes. The drawback of relying more heavily on ICT for education is that the children of these parents will be further disadvantaged.

What needs to be done to increase the levels of home internet access?

Affordability

Participants talked about the cost of equipment and the monthly subscription of broadband, and the links between social exclusion and the lack of home internet access. This is shown by the fact that the more disadvantaged people are, the less likely they are to have internet access. Therefore, these multiples of social exclusion should be taken into account when designing projects, to ensure that they target the most deprived pupils.

To some extent, the Consumer Panel's research suggested there was a perception issue around cost. Parents in low-income households often: over-estimated the costs involved in getting online; disliked the idea of a rolling monthly cost; and found the range of products and services overwhelming. The government and delivery bodies such as Becta could address this by taking into account these perceptions when planning their communications strategies.

Overcoming attitudinal barriers - persuading fearful or reluctant parents

The experiences of many participants in the Consumer Panel's research suggested that, despite the problems of affordability, fear, rather than cost, was the biggest barrier to home internet access in low-income households - and that cost may be a mask to other barriers. The research revealed also that the reassurance and advice of relatives and friends was an important factor in helping people become connected. Building the confidence of fearful parents is therefore crucial.

This is important because home internet access has become an expectation in many schools, especially at secondary level, teachers are encouraging parents to get the internet. Teachers could be given more support to persuade parents of the reasons why home internet access is important, that includes benefits beyond the child's education. One way to achieve this is by schools using evening workshops to illustrate to parents the benefits of bringing the internet into their homes, such as communicating with overseas relatives, cheaper shopping online, and access to government services and information.

Another way to overcome parents' fears about online content is for authorities to provide advice on equipment and online safety. For example, Bristol City Council produces a catalogue with information about what you can and cannot do with various technology products and gives a true picture of costs. Bristol City Council found that parents trust

this unbiased information source and better understand what equipment is appropriate to their needs.

Media literacy and safety

As goods, services, government, and education increasingly go online, there is a role for the government and Ofcom in promoting media literacy. While children are in some sense media literate, there must be support for parents, teachers and children to increase their understanding about how to use the internet safely and what information sources can be trusted. Adult media literacy can also play a role in tackling parental fears about the online safety of their children and these concerns need to be factored in when governments, schools and local authorities encourage children to go online.

Schools also need to be aware of what possible dangers and risks there are online. One way to achieve this is to embed online safety in teacher training. This can help deal with complex challenges such as the differing internet filter needs of children of different ages.

Parents can be helped with protection and media literacy issues by being provided with practical solutions and information such as internet filtering mechanisms and virus protection. If computer equipment is provided to pupils in the home, it must come pre-packaged with software and technical support provided to keep the computers safe, secure and virus-checked. One solution is for the school to provide a gateway service to the internet so that filtering is built in, and when parents log on to the network they can be reminded of the filtering options, which are adaptable depending on the needs of their children.

Another safety issue which emerged concerned a preference in some initiatives for providing PCs in the home rather than laptops or handheld PDAs. One project reported that this approach was a way of avoiding the safety issues presented by children carrying expensive equipment between school and home – children could be vulnerable to being assaulted and the equipment being lost, stolen or damaged.

Sustainability

To ensure that projects are sustainable they must be concerned with more than just the provision of equipment and access. Technology by itself will not make a sustainable change.

The key is to understand the importance of ownership and to follow the basic principle that people have a stake in an online programme if they are spending their own money. Also, parents and local authorities should therefore be asked to contribute financially to these projects. An element of parental contribution is key, as parents that make financial commitments are more engaged and more likely to keep the internet once projects come to an end. Similarly, it was felt that local authorities were more likely to think to the future and plan in a sustained way if spending came from their own budget as well as, or instead of, from a central government grant.

An important way of harnessing what is already being done is to improve the way that initiatives are evaluated. It was felt that a common national evaluation framework was needed, which would create a central store of information about projects to provide

home internet access. This would capture elements of good practice and lessons learned as well as providing a way to track and assess the schemes, to see what does and does not work.

Making the case for resources

To make projects attractive to funding bodies it is important to learn from other initiatives, identifying appropriate solutions and developing a credible business strategy. And while early indicators show that ICT in education increases educational attainment there are broader societal motivations that could be included when trying to make a business case, such as the social cost of deprived children further disadvantaged by a lack of home internet access.

Collecting evidence of the benefits of home internet access projects would make a compelling case for further investment in such schemes, by central and local government, as well as schools themselves.

What are the components of successful projects for home internet access?

The discussion identified a number of components that contribute to the success of home internet access projects. These can be summarised in the following categories.

Leadership

A strong project leadership role is critical for driving a project forward and ensuring its success. Headteachers must be fully involved and supportive of the project. It is also important that there is a dedicated and highly committed project manager who can provide technical support and be the focal point of the project when issues arise. This person should also engage with parents and children in their homes, providing equipment and information support – this personal link helps provide confidence for those parents who are unsure of ICT.

Training

Teachers, as mentioned earlier, need to receive support and ongoing training in order to make full use of the new technologies in their teaching methods. Teachers will need to be equipped to answer pupils' queries about ICT and to be fully aware of online safety issues for children.

Parental engagement

Experiences shared at the workshop revealed that parents are willing to be involved and contribute financially to acquire home internet access, given the right incentives, such as subsidised equipment and training that engages them.

To support parents who are new to the internet and ICT, support programmes need to be tailored to their individual needs so that they can learn the required skills. These programmes should let parents experiment at their own speed and with areas that interest them, such as pursuing hobbies or shopping online. One project that was successful in engaging parents and increased their confidence in using ICT and the

internet did so by requiring parents to attend eight hours of taster sessions before they qualified for the home internet package - a package that was heavily subsidised.

The role of children themselves

It is worth noting that children can help close the digital divide. Children are widely viewed as "digital natives", very much at ease with new technologies at home and from learning new ICT skills at school. The provision of a PC and internet access at home can help overcome parental fears about this technology. In this instance the child becomes the prime educator for the family - the training agent.

Community specific

Solutions that achieve home internet access have to be tailored and specific to the local community – these will be different for rural or urban areas, areas that are ethnically diverse, or localities where, for parents, English is not the first language. Thus there will not be a one-size fits all solution, rather a number solutions that will be appropriate for different children who are in different situations. Furthermore, thought needs to be given to the requirements of children with a disability who may need assistive technology to help them get online. Such extra requirements could relate to equipment, cost or training support.

Also, lessons can be learnt by looking outside the school environment. The Purple Club[5] is a scheme that is being trialled with 13 care homes and drop-in centres throughout Essex. The club provides a safe and secure online teaching platform that includes lessons, content and mentoring. It has had to tailor its programme to the needs of children that are in care, not at school or home-schooled.

Connectivity

Getting children online at home is about connectivity as much as equipment and this must be allowed for in the planning of projects. Although the most straightforward approach would be to provide DSL[6] connectivity through a phone line, it was noted that some of the poorest homes cannot afford, or do not have access to, a fixed line at home.

Thought must be given, therefore, to wireless solutions. A wireless cloud over the area of the project is one approach, using either Wi-Fi or WiMAX[7] technology. At the moment the prohibitive cost of providing such a scheme acts as a barrier to this solution for individual schools, though this technology may become more affordable. However, London boroughs are currently exploring options of funding wireless clouds.

Another alternative is wireless 3G. The London Grid for Learning (LGfL) has examined this closely, with local authorities belonging to LGfL possibly opting for this type of connectivity.

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[5] www.purpleclub.org/

[6] DSL, Digital Subscriber Line, is a family of technologies (such as ADSL or SDSL) that provide digital data transmission over the wires of a local telephone network.

[7] Wi-Fi and WiMAX are both technologies that provide wireless connectivity to the internet, but they work in different ways and, while WiMAX (Worldwide Interoperability for Microwave Access) is a long-range system covering hundreds of kilometres, Wi-Fi is a shorter range system, typically covering hundreds of metres.

Policy recommendations

The following are policy suggestions that emerged from the workshop. Please note that the suggestions do not necessarily reflect the views of every participant.

Government

1. The Department for Children, Schools and Families should run a targeted programme to address parental fears about cost when delivering targeted schemes to children in low-income families. Such campaigns would address perceptions that centre on costs associated with home internet access, while informing parents about the social, educational and financial benefits of getting online.

2. The Department for Children, Schools and Families should establish a common evaluation framework to ensure that good practice is captured from projects across the country, and to enable a national overview of what works and what does not.

3. The Department for Children, Schools and Families should look at ways to embed media literacy into teacher training - especially with regards to online safety and how to use ICT.

4. Local government authorities should look into the feasibility of establishing wireless solutions, using technologies such as Wi-Fi or WiMAX in school catchment areas, to provide blanket connectivity for those children participating in home internet access projects.

Ofcom

5. By promoting media literacy, Ofcom can help address a major barrier to connectivity, which is parental anxiety of the online safety of their children. Ofcom's media literacy work should give parents and children an understanding of the positives and negatives of being online and provide practical information as to how they can use software, such as internet filters, to protect against inappropriate material, fraudulent activity and invasions of privacy.

Manufacturers of computer equipment

6. Computer manufacturers need to produce equipment which includes content barriers and filters as the default setting of its software. The consumer would then be given the option to opt out of these settings at the moment of installation.

Best practice guidelines for home internet access projects

7. Becta should develop and promote best practice guidelines for home internet access projects which include the following elements:

a. Projects should include an element of financial contribution from parents, as this is likely to make them more engaged with the project and continue to pay for internet access once the project comes to an end.

b. Where projects are funded by central government, local government authorities should be asked to contribute financially, as this commitment could encourage long-term planning and thus promote sustainability once central government funding comes to an end.

c. Projects should address internet safety by providing parents with advice about filtering, and with equipment which has filtering and anti-virus software already installed.

d. Projects should engage parents. This can be done by including parental training as a key element of the project, with needs-based activities that let parents experiment at their own speed and on topics that interest them. Children should be involved as training agents.

e. Projects should support teachers, through training, to make the best use of technologies in their teaching and to understand online safety issues.