Children and Young People’s Use of Technology

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Section 1  

Summary

Children and Young People’s Use of Technology

This short consultation exercise sought to provide a snap-shot of how some children and young people in Northern Ireland are accessing and using technology, specifically the internet and mobile phones. The aim of this information gathering was to help generate some ideas about how Barnardo’s could utilise technology in its work with children and young people. The feedback has been supplemented with a brief overview of some relevant research literature.

Summary of key findings from focus groups

Both groups were enthusiastic and interested in discussing their computer related use.

Children in the focus groups spend anything from a few hours per week to five hours per day on their computers with older children reporting higher levels of use.

Typical use is surfing the net, emailing and interactive sites such as Bebo.

Most computer use took place at home.

Most children are unsupervised when they use their home computer.

Children are familiar with the key basics to keep safe whilst online but had a relaxed attitude to these risks.

Primary School boys reported higher levels of use than the girls and amongst the older group, girls reported higher levels of use.

Both groups tend to view their mobile phone as a ‘functional’ tool and this discussion did not generate much enthusiasm or ideas.

All made use of texting and kept their phone calls to the minimum to reduce costs.

There was a high level of enthusiasm regarding Barnardo’s potential use of technology and suggested developments included a Barnardo’s site for children and young people, email facility for current service users and ‘Bebo’ style networking for children and young people in contact with Barnardo’s.
Some Key Findings from Research

There is a big gap between children’s technology skills and use and parental awareness of children’s ability and nature of use.

Most children are unsupervised whilst using a home computer.

Children tend to minimise the risks presented by technology and many parents are ill equipped to prevent / address these risks.

The digital divide threatens to exclude children and families from low income households and parents for whom English is not their first or main language.

There is huge potential from technology for children’s learning and development – with the right support and the right content.

There is a lack of research to measure the contribution made to children’s education and development by providing and promoting the use of computers in schools and homes.

There is a lack of knowledge, lack of investment in teacher training and limited parental capacity to maximise the potential of technology in children’s development.

This potential offered by technology is particularly exciting for children with disabilities and special educational needs.

Some researchers / practitioners remain unconvinced that computers are essential within early years settings and suggest that investment in more teachers / early years staff would be more beneficial to children.

Online services for children are becoming increasingly available and proving popular with some children.

Online services offer a higher degree of anonymity, greater flexibility and a potentially more reflective environment in which to communicate.

Children who choose ‘online’ as a medium to seek assistance frequently remain loyal to this format.
Section 2

Methodology

The consultation consisted of three focus groups which were organised with the help of Barnardo’s staff.

Focus Group 1

A Primary 7 Class in a Primary School in the Shankill area of Belfast. Thirteen children aged 10 / 11 years took part in two separate groups. This group are not direct service users but have some knowledge / contact with Barnardo’s through a Barnardo’s Family Worker based in the school.

Focus Group 2

A group of 6 Young Carers who are part of a Barnardo’s service in the Northern Health & Social Services Area, with an age range of 12 – 15 years.

Focus Group 3

Four young people who are members of the Disabled Children & Young People’s Participation Project (DC&YP) in the Southern Health & Social Services Board area. These young people experience a range of communication and access challenges and the project has been pioneering assistive technology to promote communication for children and young people with disabilities.

The focus groups were supplemented with key findings from a range of research literature and examples of good practice.

Interviews with Disabled Young People

Two disabled young people from DC & YPPP were interviewed for feedback on how they felt computers and technology benefited them.

Interviews with Disabled Young People’s Parents

Three parents of disabled children / young people who attend DC&YP were interviewed for feedback on how they felt their children benefited from using computers and technology.

Feedback from an Advocate for Disabled Children and Young People

A member of staff who advocates for Disabled Children and Young People at DC&YP provided feedback on how computer technology benefits herself and other disabled young people.
Section 3  

Background

What do we know about how and why children and young people use technology?¹

Research tells us …

There is no doubt that new technologies have changed the landscape of childhood for ever. Young children are immersed in new technologies from birth and grow up with them as part of their every-day lives. It is central to their social life and a recent Ofcom report suggested that 70% of 16-24 year olds use net-working sites to communicate and have fun². Younger children also use technology socially, 6 out of 10 young people aged 13-17 have personal profiles on net-working sites³.

Research highlights number areas where there is a significant gap between young people’s online activity / ability and parental knowledge and skills. For example, research⁴ involving over 1000 young people (aged 11-16) and 1000 parents found that whilst 33% of children use blogs only 1% of parents think their child is blogging. Moreover 67% of parents don’t know what a blog is. The same survey found that 13% of 11 year olds are never supervised online and over half of all children are never or hardly ever supervised online. Interestingly, whilst 45% of parents of 11 year olds think they know what their child is doing online at all times 11% of 11 year olds say their parents know nothing about their online communication. In terms of monitoring safety online, two thirds of parents were confident they could block specific site access but 46% of young people are confident they can get round these blocks.

Many parents (69%) were aware that they know less than their children about mobiles and 57% reported knowing less than their children about internet. One consequence of this is that whilst 26% of parents can’t check website history, 65% of young people know how to clear their internet history.

These findings illustrate the ease and knowledge with which young people negotiate the internet and the lack of awareness of their activity amongst some parents. Dangers of this gap mean that many parents are ill-equipped to promote the advantages of new technologies or provide realistic advice or protection regarding technology risks.

Further research on parental involvement from the US highlights that amongst parents socio-economic divisions exist in relation to their IT know-how. Parents with low to moderate incomes were more likely than upper income families to rely on internet

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¹ This review refers to technology to describe computer use, internet and mobile phones
³ Independent on Sunday cited by Young People Now 7-13 February 2007
⁴ GET I.T. Safe (2006) NCH and Tesco
service providers to filter content and watch out for children’s safety. Higher income families are more likely to take responsibility themselves\textsuperscript{5}.

\textsuperscript{5} Lipper & Lazarus (2004)
Section 4            Evaluation Findings

Focus groups tell us ....

The feedback from children and young people in the consultation confirm these recent research findings.

The Primary 7 children mostly began using computers when they were 5 years old, although two boys recalled playing computer games since they were four. Children’s computer use mainly took place at home and in this group of 13 children from a disadvantaged community in Belfast, only one child did not have access to a home computer. The second most common IT venue was in school, followed by the local library. Most children reported unsupervised computer use and said that they were with friends or alone when on the computer. Most children also stated that their parents ‘couldn’t understand’ the computer and were reluctant to use it. Only three children said that their parents ever used the computer and this was mainly for booking flights or arranging holidays.

Surfing the internet and online chat-rooms were by far the most common type of computer use. Popular sites included Bebo, Chat FreeWay and MSN. Children enjoyed these sites as they could chat to friends who do not live close by, they could meet new friends and talk to people from different parts of NI or even different countries. Only one child had not visited chatrooms because her uncle told her they bad. Other sites visited included, topic specific sites such the NI Football Association and sites where you can download photos of footballers, pop stars or play games (such as Funny Treats, Slime Soccer, Mini Clip and UTube). Children (when promoted by their teacher) also reported using the computer to find information for school projects.

The time spent on the computer varied between boys and girls with boys reporting the longest times. The lowest time spent online / on computer was 1-2 hours per week for the child who did not have a computer at home. The most common usage was about 5 hours per week and a smaller number said they used it for 1-3 hours everyday. One child said he would rather go out and play.

The older young people who are part of a Barnardo’s Young Carer’s project also reported high levels of internet use, again mainly unsupervised.

Their main point of use was at home and all had access to a home computer and three young people had their ‘own’ computer. All used computers at school and two young people occasionally used the local library also. They were aware that computer access was provided in Internet Cafes and some Community Centres but did not access these.

Typical use was 2 – 5 hours each day (4 young people) which is higher than the 10-11 year olds. Two young people used their computers a few evenings a week. Interestingly, unlike the Primary School children, girls reported the highest levels of use.
Bebo was by far the most popular site and most common use of time when online. The attraction of Bebo was described as

- way of communicating – sharing stories, gossip and info
- keeping up to date
- leaving messages for friends
- posting and looking at videos and photos
- cheaper than phoning
- more private (can’t be overheard) “can say things on Bebo you wouldn’t say on phone”

Other favourite sites included MSN Chat, UTube, Yahoo talk site, Ebay and sites to download music and games. Some had used BBC Bitesize for school revision and two boys spent most of their time on sites relating to superbikes and cars. (Some of the most popular online sites in the UK are detailed in appendix one)

**Use of technology to promote the needs of children and young people with disabilities**

The Disabled Children and Young Person’s Participation Project (DC&YPPP) is a Barnardo’s project in Armagh which has pioneered the use of technology to promote communication and participation for young disabled people. Its age range is 4 – 25 years and the youngest child they are currently working with is 4 years old.

The project’s base has a range of specialised and adapted equipment to enable children and young people, who would be unable or have limited ability to access traditional PC equipment. This includes four computers with touch screen monitors, mouse alternatives and a range of software. They also have Smart Nav through which a young person places a small silver dot on a part of their body which they can use to control a cursor on screen (for example, placing the dot on their forehead and moving their head to control the cursor). Smart Nav can be used in conjunction with on-screen keyboards for typing and can be programmed to ‘click’ and ‘double click’. Mouse alternatives include the Big Switch, a large brightly coloured switch pad, long switches which can be controlled by various body parts, a large joystick, a wobble switch and a pressure switch. Software programmes such as Switch It and Clicker 4 are also available.

The project provides a range of IT equipment and software which users can borrow and has assisted in providing computers for a small number of families.

Four young people involved in the DC&YPPP took part in this consultation and shared some views about the difference technology has made to them.
The young people experience a range of disabilities which include:

Jane and Sophie are wheel chair users who have Spina Bifida

Kori has Cerebral Palsey and is unable to verbally communicate

Linda is blind and has a physical disability

Through the use of IT Jane and Sophie have been able to learn new skills, gain in confidence make a valuable and meaningful contribution to the DC&YPPP. Jane is a member of staff and Laura collates and designs a quarterly newsletter for service users of the project. The Internet plays an important role in their social life as they can email friends and interact with others on chartrooms. As Jane said “I live on the Internet,” email and Bebo are her main social outlets as her friends live in Belfast.

Without support to use adapted technology Kori would probably be in a day centre or at home. He has limited verbal communication skills and uses IT to type out his thoughts, ideas and wishes. IT enables Kori to perform an important role during his placement, he can word process written documents, look up and access information online and handle a range of other IT office tasks. It also gives him a ‘voice’ enabling him to participate and interact with others.

Computers provide an intensely personal and private space for young people, particularly important to young disabled people who rely on others for much of their care and enjoy less privacy than non-disabled peers. Jane, Sophie and Linda all have their own pages on Bebo and email accounts and Kori has his own personalised screen saver.

Linda who is blind has her own lap-top and the project recently helped secure funding for her computer and organised training provided by another blind person which Linda’s mum also attended. Using technology Linda can listen to stories, email friends and maintain her own Bebo site. She can print out materials in Braille and is an avid reader (her favourite authors are Jacqueline Wilson, Enid Blyton and Lucy Daniels). She has a mobile phone with a large keypad which enables her to stay in touch with friend and family.

The project has a wealth of moving stories about the many young people who have been supported by the project and empowered through IT to make decisions, have choices, express themselves and interact with others - often for the first time in their lives.
Feedback from 3 young people from the Disabled Children & Young People participation project on the difference assessing Technology has made to their life includes:

- “Am now able to speak up for my self”
- “Can do drawings on the computer”
- “Have learnt how to do power point presentations”
- “Been able to complete 7 ECDL courses at Barnardos project”
- “I use the computer to communicate with friends and family”
- “Helps to keep me up to date with sports and other information”
- “Can email people”
- “Can type when I want to ask or answer a question”

Feedback from 3 young peoples parents on the difference that accessing computer Technology has made to the young people includes:

“Before I was not aware that such support was available. Would have liked to have been referred to the service sooner.”

“With the touch screen computer Tina can now do spelling for her homework by touching the keys with her fingers and nose. It has really opened Tina’s eyes and mind of what she can do. The more that Tina can do for herself the more proud she is off herself. Tina loves achieving things herself and showing someone else that she can do it.”

“Would like Elle to be able to go to Barnardo’s service every week.”

Feedback from an Advocate worker for Disabled Children and Young People includes:

“Assistive Technology has helped me to build my confidence to help other young people get a voice. The young people in the group have a voice now that they never had before which is a great thing to see”
Technology and Education Outcomes

Students with special educational needs

Research highlights the many ways technology can assist children and young people with special educational needs to meaningfully engage in the classroom and interact with their peers on school projects and tasks. (2000:104) “Teachers have found that technological innovations can help level the playing field for special needs students and enable these students to succeed in the regular classroom”. Some examples -

- word processing is helpful for children with delays in fine motor skills that impair their ability to write legibly
- word prediction software helps students communicate and express themselves whilst avoiding the difficulties and frustrations they experience with writing and spelling
- internet based and online projects facilitate collaboration and meets academic and social needs
- multimedia can help students express themselves in ways text cannot
- technology based interventions such as devices to convert text to speech and vice versa, captioning for deaf young people, combining Braille with computer technology and touch sensitive screens can transform the capacity for previously marginalised young people to participate meaningfully.

US research indicates that equity of digital opportunity is fast becoming a synonym for equality of educational opportunity. However, having the presence of a computer home or school is not a catalyst to better educational outcomes (Deed, 2001).

There has been investment in technology within mainstream educational settings from pre-school through to college level. Whilst research shows that parents support the promotion of IT starting with young children (Marsh et al), not all early years practitioners are convinced.

This inequity crosses socio-economic, educational, cultural and minority community issues. Therefore action is needed to ensure

- that advantages of technology are not concentrated with those with greater educational and financial resources.
- access to good quality software and support for and from parents and other educators who know how to promote and maximise educational benefits.
- that minority groups have access to material that reflects their needs, language and culture
- consideration for parents with low levels of literacy
To maximise the potential for technology to promote education outcomes for children we need to consider more meaningful ways of promoting age and ability appropriate technology use. Jane Healy (2000) states that with young children in particular, computer use may be either constructive or destructive activity. She highlights the challenges of appropriate supervision, appropriate content and activities dubious educational value as key issues. Researchers in the US are currently exploring how IT applications can contribute more meaningfully to the skills children need to succeed in school and adulthood. Healy argues that primarily children need reading, language and critical reasoning skills and that disadvantaged children would be better served through investment in excellent teachers rather than technology. No one denies the potential of technology in children’s education. However, with the exception of assistive technology research has not yet demonstrated significant gains for students to justify the expense, especially for younger students.

Healy writes (2000:173)

“An overwhelming body of research demonstrates that close human contact is the most essential ingredient in becoming an effective human being”

She believes that to fully reach its potential, children’s technology needs to put education before entertainment. We also need to engage professionals to develop research based models that work in practice.
Case Study - Tina

Detailed below is feedback from Tina’s mum on how the use of Computer Technology has been able to make a difference to Tina’s life.

Tina is six years old and has Cerebral Palsey. Tina can’t talk or walk and has very little co-ordination in both her hands and legs. Tina has to have everything done for her. “We have just been able to get her toilet trained this year. This is something I never thought we would be able to do.”

“Tina attended a pre school who informed me that Tina was very intelligent and that her academic abilities were far more advanced than her peers. Kelly also attended MENCAP. MENCAP was the first to pick up on Tina’s intelligence and academic abilities. Tina’s Occupational Therapist informed us that computers would be the way forward for Tina as she is very intelligent and it would be her only way of communication.”

“Tina then attended a Barnardos service (Disabled Children and Young People participation project) who have Smart Naf Clicker 4 computer software equipment. The first time Tina used the equipment she was able to use it within 10 minutes. Tina is very intelligent, and we wanted to find out just how intelligent she is. Through the software we have realised that Tina has taught herself how to read and spell.”

“The computer software has made enormous difference to Tina. Tina was frustrated as she often new the answers to questions or wanted to say something but could not communicate. I know what Tina is saying but it is the outside world that is the problem. The software is like a speech box for Tina. She can use it to communicate with others. If she had the system on a laptop she could take it out shopping as Tina loves shopping. It has made all the difference. Tina would have just sat back when she knew the answer but now she has ways and means of communicating.”

Barnardo’s are updating their software system at present.

“We have already installed Clicker 4 at home, but we are getting it updated to Clicker 5 because it is more advanced for Tina and more user friendly. Tina’s school (St Colms for Physical Disabilities) have just recently (this week) installed the Clicker 4 computer software for Tina. This is going to be a means of giving Tina homework.”

“I feel for Tina, this computer software is her way forward.”
Section 5 Recommendations & Conclusion

Looking to the Future

Recommendations from children & young people in focus groups

All the children who took part in the consultation were enthusiastic about computer use and amongst the older children, this was clearly key to their social interaction. Both groups felt that using computers and the Internet had potential for Barnardo’s work and contact with children. Interestingly, feedback about mobile phone was much less enthusiastic. This was viewed generally as something more ‘functional’, useful for texting and keeping in-touch when other means were not available. The children did not express many ideas about the potential future use of mobiles.

Feedback from Primary School Children

The Primary School children said they all enjoyed the computer and wanted to be able to do better more exciting things, particularly with their school computers. Their school does not have a computer suite and the classroom computers are very old fashioned and incompatible with much new software. They wanted

- new, more modern computers with a flat screen
- interactive white-boards
- access to individual lap-tops in school
- better and more exciting software

They also suggested ways that Barnardo’s could use computer technology to communicate with children

- Kids Chat Rooms were children could talk to each other
- Kids web-sites for buying and selling
- Sites to help kids with their homework
- A Barnardo’s web-site for children

They thought having a Barnardo’s web-site for kids would be good and suggested the following to make it child-friendly

- promote it with leaflets and posters and ‘make it look really fun with big fireworks’
- Have colouring-in pages and games
- Have photos and stories about famous people that children like (sports stars for example)
When asked how children could find out about this site they suggested

- Have an ad for it pop up on other sites that children use
- Most popular was ‘word of mouth’ as ‘you hear about good sites from other people’

**Feedback from Young People**

Feedback from Young Carers centred around how they, as active service users would like to see technology being used.

Firstly, they felt a dedicated site for children and young people using Barnardo’s services would be useful and interesting. Several of the group did not realise that their project was part of a Northern Ireland wide organisation working with thousands of families, let alone part of a bigger UK organisation and suggested that a web-site would help inform young people about the organisation.

They also suggested a service specific site for their project. This could be used to find out what activities were coming up, which staff were available if you needed something and general information about the project. Using email to communicate was considered a good idea. One young person highlighted that they often didn’t see their worker for a few weeks at a time and they would like to be able to email the service and receive a reply if they needed help between visits.

The young people also felt a site similar to Bebo would be a way to encourage young carers to talk to each other and share information. They also emphasised the importance of internet for young people who live in rural areas or who feel isolated.

One of the Young Carer staff members suggested an Internet Café with trained staff to support and talk to the young people when they dropped in. This would be particularly useful for young people who don’t have computer access at home.

**Technology and Service Delivery**

Counselling, therapy and advice giving services have increasingly been offered on the internet. Some professional organisations such as the American Counselling Association have adopted codes of ethics for online counselling that supplement their codes of ethics. However many professional groups have not adopted separate codes of online service delivery leaving practitioners with little ethical guidance. There is still debate about the desirability of offering therapeutic or similar services in online formats as opposed to traditional settings (Hunt 2002).

Various technologies being used to deliver counselling services includes – email, interactive web-sites, newsgroups, LISTSERVs, virtual reality, chat rooms,
teleconferencing and instant messaging. Three examples of practice (two for children specifically are outlined in appendix two)

**Considerations for Barnardo’s**

Some key challenges facing Barnardo’s are how to ensure technology based interventions aimed at children are

- safe
- effective
- equitable and
- ethical

Hopefully this quick exercise will stimulate further discussion and there is obviously a need for further in-depth consultation and research. However, the following are number of suggestions for future considerations drawn from research literature.

- Robust monitoring, screening and safety measures (a site children and parents will know is safe)
- Training and support for professionals and parents
- Practical IT support to enhance and maximise take-up
- Culturally sensitive and culturally specific content
- Language and content which acknowledges a range of literacy levels
- Consideration for those for whom English is not their first or main language
- Research & Evaluation to ensure effectiveness and best practice
- Balancing entertainment with educational value
### Popular Networking Sites

#### Bebo

Bebo has been in the public eye recently due to bullying behaviour and the presence of inappropriate photos and videos. Launched in 2005 and primarily used by the school aged children it has around 22 million members (8 million from the UK). Young people can email each other and create their own 'page' with blogs, photos, videos and emails.

#### MySpace

The best known net-working site where users create their own profiles which can link to friends. Users can develop blogs and display photos and videos. The site now has in excess of 100 million account users.

#### Piczo

An online photo web-site builder and community. It has been described as the fastest-growing online brand last year with young people aged 13-15. Almost half of it's audience are girls aged under 18.

#### LiveJournal (LJ)

An online community were users keep blogs or journals. It has a strong social aspect and has a region function where users can find people by location. It has around 200 000 UK users.

#### Faceparty

Most popular with teens and those in their early twenties. Allows users to create online profiles and chat using instant messaging. In June 2006 the site claimed to have 6 million subscribers with 35 000 new members joining each week.
Appendix Two

Some examples of existing practice

Online Counselling - KIDS Help Line in Australia

Kids Help Line introduced email counselling in 1999 and web counselling in 2000 in response to demand from children and young people. Kids Help Line state “Online counselling can offer young people more anonymity and a greater sense of control in terms of what they disclose to us”. For example – speaking on the phone reveals many clues to a person’s identity – gender and approximate age. Online counselling provides distance and can allow the young person to be more reflective which can help those who are particularly nervous or find it hard to talk to someone. Also, young people are accustomed to using chatrooms and are comfortable with this format. Interestingly young people who make contact online are loyal to this format and whilst some eventually make phone contact many more will simply not talk on the phone.

Kids Help Line, in partnership with the Queensland University of Technology have developed a range of tools to enable basic counselling techniques such as relationship building to take place online. This can include summarising what a young person has written, spelling out their emotions, and personalising responses. This now includes ‘emoticons’a scale for indicating emotional intensity and an interactive drawing tool (which is still in development). Only experienced Kids Help Line counsellors who have completed additional online training undertake web-based counselling.

Email service - Samaritans

The Samaritans has provided free emotional support and advice by email since 1995. Although not for children, it does show that very sensitive and potentially life protecting or life saving support can be offered using technology. The service promotes confidentiality and anonymity by helping people create an anonymous email address and ensuring that staff reading the messages do not have access to the senders email address. They endeavour to reply to messages within 24 hours and receive over 1750 emails per week. The website informs people of the phone number should someone want to contact them immediately.

Online Counselling - NSPCC

The NSPCC there4me online counselling facility offers online support to young people from the British Isles aged 12-16. The website provides a range of options

- ‘1-2-1’ - Direct interaction with a trained online counsellor
- ‘Message Board’ – where children can post their own views/ideas
- ‘Private In-box’ – where they can leave a private message and receive a confidential reply
- ‘Ask Sam’ – contact there4me Agony Aunt
The site also contains a wide range of useful information in relation to key issues for young people such as bereavement, sexuality and sexual health and bullying.