

National report for UK

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1 1. The Internet

1.1 Children's Internet access

Among the European countries, including EU Kids Online participants, the UK has a fairly high level of Internet and Broadband access. As regards Internet access in general, we are only behind Iceland, the Netherlands, Denmark, Sweden, Luxembourg and Finland (and probably Norway and Switzerland, although the figures are not available). As regards Broadband access we are only behind those same countries and Belgium¹. These Internet figures mirror those for having a home computer at all. The countries with high broadband penetration listed above, including the UK, also have some of the lowest broadband prices. All the countries with high Internet access have higher GDPs. But not all countries with high GDPs have quite such high Internet access (e.g. Ireland, Austria and then Germany, France, Italy).

We checked a sample of 6 major ISPs (BT Internet, AOL, Virgin, PlusNet, Orange and Vodafone at Home). All these ISPs provided parental controls and some information about children and the Internet – although never on their homepage (it required some searching to find these). Mostly, the information the ISPs provide relates to their own products, whereas only Orange – from the 6 ISPs reviewed – provided comprehensive information (in some detail, with examples) about children's safety on the Internet and parental regulation – information that goes beyond the company's products.

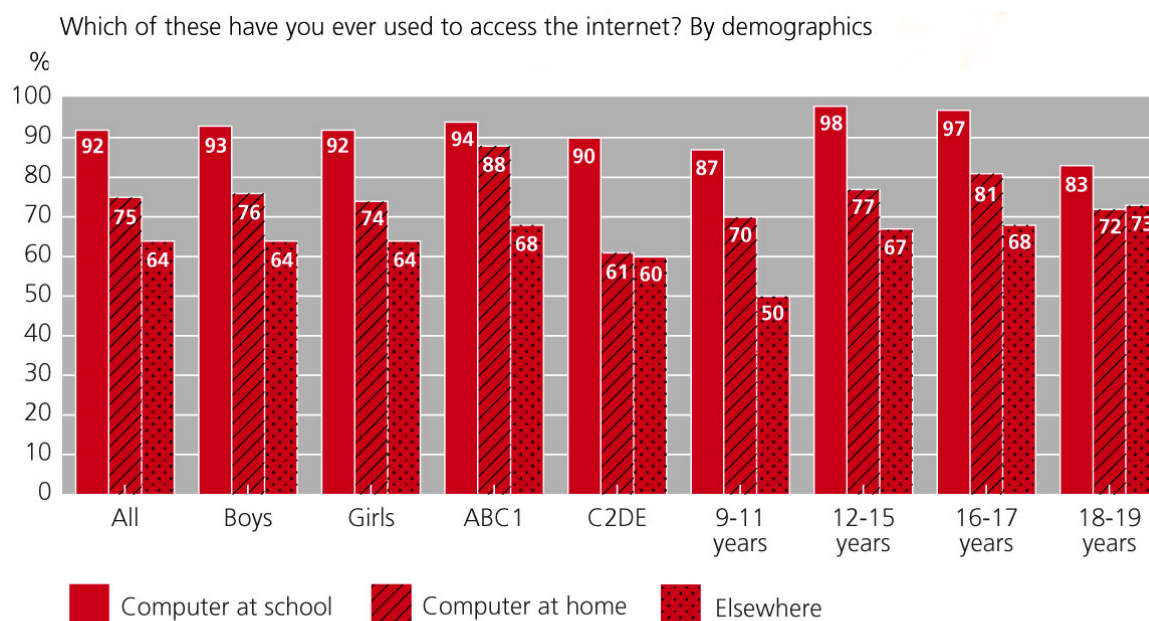
Apart from ISPs, other industry players also play a key role in raising awareness – examples include Microsoft's provision of safety awareness training materials to every secondary school, Yahoo's new online safety information and Bebo's recently launched safety site. There is some collaboration and exchange of personnel across the NGO and industry organisations, aiding a common approach.

1.2 Findings on children's access to the Internet and online technologies

The *UK Children Go Online* survey found in 2004 that three quarters of all 9 to 19 year olds (75%) have accessed the Internet from a computer at home. Overall, 71% of 9 to 19 year olds currently have Internet access at home via a computer, and 74% have access via either a computer, games console or digital television. Almost all children and young people (92%) have accessed it at school. Two-thirds (64%) of 9 to 19 year olds have also used the Internet elsewhere. This includes 48% in someone else's house, 31% in a public library, 17% via a mobile phone, 9% in an Internet café, 7% at a parent's workplace, 6% via a games console, 4% via digital TV and 4% at their own workplace. Access at school is greater for teens than for either the youngest (87% of 9 to 11 year olds) or oldest group (83% of 18 to 19 year olds). Figures for access at home show a parallel age trend for access in school, being greater for the teenagers than for the children or young adults. Use of the Internet elsewhere (i.e. other than on a computer at home or school) becomes more common as children grow into their teens. Gender makes little difference to access in any location.

¹ ITU statistics

Figure 1: Access to the Internet by demographics (UKCGO, 2004)



Base: All 9-19 year olds (N=1,511)

Ofcom's Media Literacy Audit (2006) amongst children (N=1500, aged 8 to 15) found in 2005 that nearly two-thirds (64%) of children aged 8 to 15 have access to the Internet at home, and this is more common for 12 to 15 year olds than for 8 to 11 year olds (67% compared to 61%). Access from home is significantly lower for children from minority ethnic groups (51%) and those in low-income households (42%). Amongst older children there is no difference by gender, but amongst 8 to 11 year olds, boys are significantly more likely to use the Internet at home compared to girls (at 54% compared to 42%).

The Ofcom study focuses on Internet access at home and looks at the 'bedroom' culture of Internet access amongst children. As the graph below illustrates, the study finds that in 2005 Internet access in the bedroom is more common amongst children aged 12 to 15. 13% of all children aged 12 to 15 have Internet access in their rooms, compared to 3% of 8 to 11 year olds. 12 to 15 year old girls are more likely to have access in their rooms than boys.

Also, children living in rural areas, from minority ethnic groups, and those in low-income households, are less likely to have Internet access in the bedroom (at 8%, 7%, and 2% respectively compared to 13% of all children aged 8 to 15 with the Internet at home).

ChildWise's Monitor Trends Report (2007, N=1200, aged 5 to 16 years) found in 2006 that 93% of children have a PC at home, and a third have their own PC. Also, eight in ten 5 to 16 year olds have Internet access at home, and half have broadband.

According to the Ofcom Communication Market report (2007), access to communication devices is widespread among children and youth. More specifically, Ofcom reports that in 2007 at the age of 5, over 50% of children have their own television, 10% have a mobile phone and over 40% have a games console, whereas 75% of 11 year olds claim that they own each of TV sets, games consoles and mobile phones and this increases with the child's age up to 15. Mobile phone ownership, especially, edges ahead to make it the single most common device, owned by 90% of children by the age of 14. Finally, among 13 to 15 year olds, 15% claimed to own their own webcam.

Livingstone and Helsper (2007) found, in the UKCGO survey, as follows:

Table 1: Dimensions of access to the Internet, by demographics

	% Non users	Average number of access points	% Access at home	% Broadband access	% Bedroom access
AB	0	3.38	91	43	20
C1	3	3.13	83	35	22
C2	3 **	2.74 **	77 **	31 **	21 **
DE	7	2.41	47	25	13
Average	3 %	2.92	74 %	35 %	19 %

Base: All 9-19 year olds in UKCGO survey (N=1511).

** Differences significant at $p < 0.01$.

NB AB = middle class, DE = lowest class

Overall, 88% of middle class but only 61% of working class children have accessed the Internet at home. The relative privilege of ABC1 over C2DE children is also evident in relation to use of the Internet other than at home or school, with 68% of middle class children using the Internet elsewhere compared with 60% of working class children.

The Ofcom Media Literacy Audit found that in 2005 that access to the Internet at home is significantly lower for children from minority ethnic groups (51%) and those in low-income households (42%). Overall, nearly two-thirds (64%) of children aged 8 to 15 have access to the Internet at home. Also, the study suggests, with respect to Internet access in a child's bedroom, that children with the Internet at home living in rural areas, from minority ethnic groups, and those in low income households are less likely to have Internet access in the bedroom (at 85, 7% and 2% respectively compared to 13% of all children aged 8 to 15 with Internet access at home).

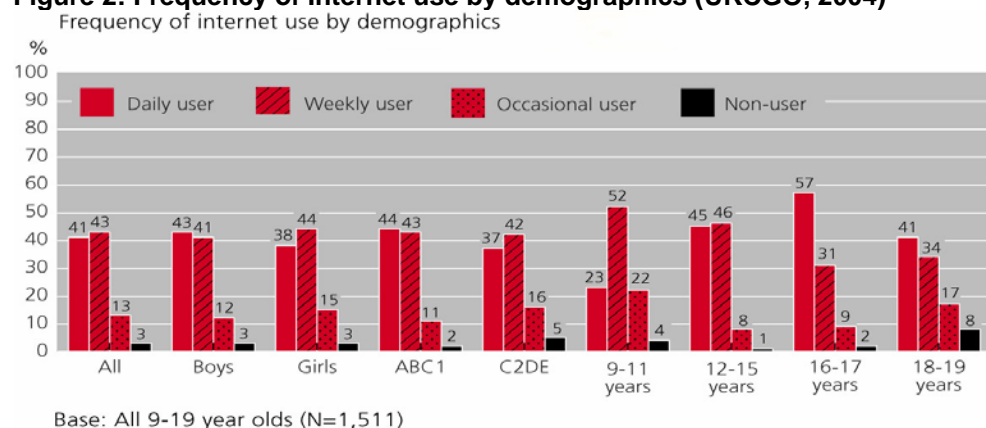
1.3 Findings on children's use of the Internet and online technologies

The UKCGO study's findings were as follows (Livingstone and Bober, 2004):

Frequency: 9 to 19 year olds are mainly divided between daily users (41%) and weekly users (43%); only 13% are occasional users, and just 3% count as nonusers. There is a small tendency for more boys (43%) than girls (38%) to be daily users, and a similarly small difference in relation to socio-economic status. Middle class children (44%) are more likely to be daily users than working class children (37%), and the latter group contains more nonusers (5%) than the middle class group (2%). The age differences in frequency of use are more marked: 9 to 11 year olds are most likely to be weekly users (52%), though one fifth of them (22%) are occasional users; 12 to 15 year olds are divided between daily users (45%) and weekly users (46%) while 16 to 17 year olds are most likely to be daily users (57%). The 18 to 19 year olds are rather more divided, for, while 41% are daily users, they also contain the highest proportion of both occasional users (17%) and nonusers (8%).

Time spent: One fifth (19%) of 9 to 19 year olds spend about 10 minutes per day online, half spend between about half an hour (25%) and one hour (23%) online, and a further fifth go online for between one (14%) and three hours (6%) each day. Only one in 20 (5%) spend more than three hours on the Internet on an average day. Any gender differences in time spent online are marginal, as are class differences, though age differences are more marked. The youngest age group (26% of 9 to 11 year olds) are very light users, spending about 10 minutes per day on the Internet. Among the older age groups, a sizeable proportion spends several hours online each day. Indeed, half of 12 to 15 year olds go online for one hour or more, as do two thirds of 16 to 17 year olds. Among 18 to 19 year olds, this decreases again to one half who spend one or more hours on the Internet each day. Among 9 to 11 year olds, however, it is only one third who spend this long online.

Figure 2: Frequency of Internet use by demographics (UKCGO, 2004)



The Ofcom Media Literacy Audit amongst children found that in 2005 for all children aged 8 to 15 who use the Internet at all (86% of 8 to 11 years and 96% of 12 to 15 years) the overall estimate of use is 6.2 hours per week (4.4 hours for 8 to 11 years and 8 hours for 12 to 15 years). Children in Northern Ireland and children from minority ethnic groups have a significantly lower volume of use, at 5.0 hours and 5.1 hours respectively per week compared to 6.2 hours across the UK.

ChildWise Monitor Trends Report (2007) found in 2006 that children using the Internet spend an average of 1.9 hours a day online.

The Ofcom Communication Market report (2007) found that 70% of children aged 8 to 15 used the Internet at home in 2007 compared to 56% in 2005. It records a similar increase of frequency use of the Internet at home from 47% in 2005 to 52% in 2007. It also reports that use of the Internet increases with age, with 64% of children aged 12 to 15 year olds, 41% of those aged 8 to 11 and 16% of those aged 5 to 7 year olds using the Internet regularly. Finally, it identifies a small gender gap between female (48.5%) and male (51.5%) users aged 2 to 17. Regarding time spent on the Internet, users aged 12 to 17 spend online 24.9 hours a month on average, whereas those aged 18 to 24 spend 37.9 hours a month on average. Those with home access spend on average nearly one and a half hours a day online, which rises to an average of two hours a day among 12 to 15 year olds, nearly one fifth of whom spend over 20 hours a week on the Internet.

UKCGO findings (Livingstone and Helsper, 2007):

Table 2: Dimensions of access to the Internet, by demographics

	% Non users	Average number of access points	% Access at home	% Broadband access	% Bedroom access
9-11	4	2.30	70	36	10
12-15	1	3.02	74	33	19
16-17	2 **	3.32 **	83 **	40	26 **
18-19	8	3.18	69	33	24
Average	3 %	2.92	74 %	35 %	19 %

Base: All 9-19 year olds in UKCGO survey (N=1511).

** Differences significant at $p < 0.01$.

Table 3: Extent of Internet use, by demographics

	Frequency of Internet use (scale 1-8)	Years of Internet use	Average time online (scale 1-7)
9-11	5.30	2.4	2.9
12-15	6.22	3.3	3.7
16-17	6.41 **	4.3 **	4.0 **
18-19	5.66	4.9	3.6
Average	5.93	3.6	3.5
N=	1511	1229	1459

Base: All 9-19 year olds in UKCGO survey (N=1511).

* Differences significant at $p < 0.05$.

** Differences significant at $p < 0.01$.

NB Frequency of use also increases by age if you compare only those with home access (since younger are less likely to have this):

Table 4: Frequency of use for those with home access

Frequency of use among those with home access (Scale 1-8)	
9-11	5.70
12-15	6.45
16-17	6.69 **
18-19	6.37
Average	6.30
N=	1115

Base: All 9-19 year olds in UKCGO survey with home access (N=1116).

* Differences significant at $p < 0.05$.

** Differences significant at $p < 0.01$.

The Ofcom Media Literacy Audit found that in 2005 Internet access in the bedroom is more common amongst children aged 12 to 15, with 13% of all children aged 12 to 15 have Internet access in their rooms, compared to 3% of 8 to 11 year olds. In terms of use it found that 86% of 8 to 11 year olds and 96% of 12 to 15 year olds use the Internet, whereas nearly half (48%) of children aged 8 to 11 use the Internet at home, and two-thirds (65%) of children aged 12 to 15 do so.

The Ofcom Communication Market report found that in 2007 use of the Internet increases with age, with 64% of children aged 12 to 15, 41% of those aged 8 to 11 and 16% of those aged 5 to 7 using the Internet regularly. Also, this study illustrates that the proportion of 12 to 15 year olds using mobile phones regularly is more than twice that of 8 to 11 year olds. For younger children, TV is still the main medium, whereas older children use a broader range of media more regularly.

By interviewing parents of children aged 5 to 11 who use the Internet at home and children aged 12 to 15 who use the Internet at home, the same study found that the older a child is the more time it spends on the Internet. Thus 2% of children aged 5 to 7, 4% of those aged 8 to 11 and 17% of those aged 12 to 15 spend more than 20 hours a week on the Internet.

There are few or no gender differences in access – boys and girls are equally likely to have access at home and school – however, the UKCGO survey found that boys had slightly, but significantly, more places in which they could access the Internet than girls (3.0 vs. 2.8) and were significantly more likely to have access in their bedroom (22% vs. 15%) (Livingstone and Helsper, 2007).

There are gender differences in amount of use. The UKCGO survey found boys to use the Internet more frequently, for more time per day, and to have been online for more years (slightly) (Livingstone and Helsper, 2007). On the contrary, the Ofcom Media Literacy Audit found in 2005 that although amongst older children there is no difference by gender, amongst 8 to 11 year olds, boys are significantly more likely to use the Internet at home compared to girls (at 54% compared to 42%). Also, whilst solitary (children who use the Internet in the bedroom and on their own) Internet use accounts for more boys than girls aged 8 to 11 who use the Internet at home (6% compared to 1%), the reverse is true for 12 to 15 year olds, with a higher incidence of solitary users amongst girls compared to boys (at 23% compared to 11%). With respect to Internet access in the bedroom, 12 to 15 year old girls with Internet at home are more likely to have access in their rooms than boys within the same age range (26% compared to 13% for boys).

The Ofcom Communication Market study supports the argument of gender gap, as it reports that in 2007 55% of users are boys and only 45% are girls for the age category of children under 12 years old. The gender gap becomes smaller as the children become older with 53% of boys and 47% of girls aged 12 to 17 being Internet users and with 51% of males and 49% of females aged 18 to 24 being Internet users. In terms of amount of use, the report concludes that male users aged 2 to 17 are significantly more likely to spend more time on the Internet than female users of the same age group.

There are no significant or evident gender differences in online skill or self-efficacy as measured in the UKCGO survey, though slightly more boys (35%) than girls (28%) consider themselves 'advanced' Internet users.

The Ofcom Media Literacy Audit found that in 2005 boys are significantly more likely than girls to be aware that there are illegal as well as legal ways to access films, music and computer software on the Internet (at 80% compared to 72% for girls). Overall, three quarters (76%) of 12 to 15 year olds are aware. On the other hand, the same study indicates that girls aged 12 to 15 who use the Internet at home are significantly more likely to be confident about using the Internet than boys of the same age group (at 97% compared to 91%, respectively). Finally, boys aged 12 to 15 are more likely to state that they can't find what they are looking for on the Internet than girls of the same age (at 52% compared to 44% respectively).

1.4 Internet and Media Content for Children

The BBC is by far the major provider of TV content for children, including two digital channels devoted to younger and older children (CBeebies and CBBC, respectively). Overall, the UK has more dedicated children's digital channels than France, Germany, Sweden, Australia, Canada and the US.² However, a recent Ofcom report³ has identified a problem. Children's programming from commercial stations (ITV1, GMTV, Channel 4 and 5) has declined or remains small (Disney Channel, Nickelodeon and the Cartoon Network) since the market is less profitable than competing (adult) markets. Where commercial companies do produce children's TV, they are often concerned with global markets and so their content is little oriented to specifically British cultural values.

One debate over the last 50 years, reflected in the research of parents' views, is a concern about children's TV being so dominated by one body. While in general the BBC's output is regarded as being of a high quality, parents were happier with provisions for younger children than for older children – more factual and dramatic programmes for the latter, reflecting a broader range of culture and opinions, was requested.

Several broadcasters have websites that build on their brand and these feature in the top 20 most visited sites⁴ (e.g. BBC Children, BBC Learning, BBC Teens, Nickelodeon Kids, Disney Online, Disney International, Cartoon Network). In general, these carry games, programme schedule information, video clips, interactive content and information posted by visitors. The most visited site by children (1,058,000 visitors aged 4 to 15 in May 2007) is the social networking site Bebo, but file-sharing sites such as Piczo are also popular (BBC Children was the second most popular site, at 986,000 visitors). One other type of popular site is online gaming (e.g. Runescape, GameSpot, Freeonlinegames.com, Funny Games, Adventure Quest).

The BBC has also been active in promoting Internet skills (e.g. a few years ago, the BBC set up the Webwise initiative to encourage skilled use of the Internet across the population).

1.5 Opportunities experienced by children online

UKCGO findings:

According to 9 to 19 yr old users who use the Internet at least once a week: 90% use the it for schoolwork; 94% for information; 71% for email; 70% for games; 55% for instant messaging;

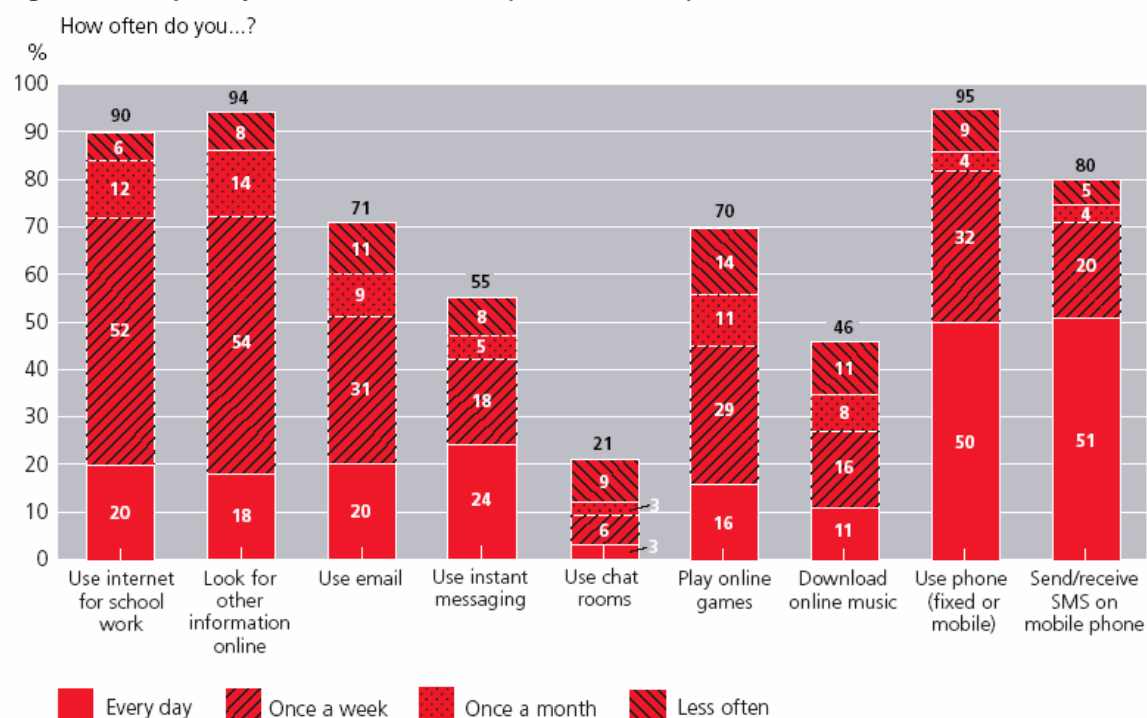
² Ofcom (2007) *The Future of Children's Television Viewing: Research Report*, London

³ Ofcom (2007) *The Future of Children's Television Viewing: Research Report*, London

⁴ Ofcom (2007) *The Future of Children's Television Viewing: Research Report*, London

46% to download music; 40% (12+) to look for products; 26% (12+) to read the news; 25% (12+) for personal advice; 21% to visit chat rooms; 21% (12+) to plagiarise; and, 34% have made a website.

Figure 3: Frequency of online activities (UKCGO, 2004)



Base: 9-19 year olds who use the internet at least once a week (N=1,257)

UKCGO asked more questions of the 12 to 17 year olds only (Livingstone, Helsper and Bober, submitted) about taking up of online activities. Table 1 shows that schoolwork (97%), searching for information (95%), communication via email (77%) or instant messaging (64%) and online games (75%) are the most popular activities among youngsters 12 to 17 year olds.

Table 5: Take Up Of Online Opportunities

Item (Do you/have you...?)	%	Item (Do you/have you....?)	%
Do work for school/college	97	Use a chat room	24
Look for info on other things	95	Vote for something/ someone	23
Send/receive emails	77	Look for info on computers	23
Play games	75	Visited websites about protecting the environment	22
Use instant messaging	64	Look for news	22
Download music	49	Contribute to a message board	19
Do a quiz	46	Send pictures or stories	19
Look for cinema /theatre/ concert listings	41	Visited websites about human rights/gay rights/children's rights	16
Tried to set up a webpage	41	Visited a Government website	16
Look for info on careers/ further education	39	Look at other people's personal homepages	14
Look for products or shop	36	Visited websites about improving the conditions at school	13
Do something that someone else has asked you to do	34	Offer advice to others	10
Watch/download video clips	30	Fill in a form about yourself	9
Send an email or text message to a site	27	Sign a petition	9
Visited websites about a charity/organization that helps people	25	Plan a trip	8
Average number of opportunities: 10			

Base: UK 12-17 year olds who use the Internet at least once a week (N=789).

According to the Ofcom Media Literacy Audit, schoolwork and playing games are the top two uses for children for both groups of 8 to 11 and 12 to 15 year olds in 2005. However, children aged 12 to 15 make a broader use of the Internet than those aged 8 to 11, with significantly higher levels of use for each of the other uses with the exception of sports news.

For both age groups, girls are more likely than boys to use the Internet for schoolwork, whilst boys are more likely than girls to use the Internet for sports news. 12 to 15 year old girls are significantly more likely than boys in this age group to use the Internet for e-mails, instant messaging (IM), TV programme websites and celebrity/showbiz news.

MSN Cyberbullying Report (2006, UK, N=516) illustrates that teens are increasingly using instant messaging, email and blogging as their main ways of communicating. Over half of 12 to 15 year olds have instant messenger conversations at least once a day and a third (33%) chat on IM several times a day. 48% use email at least once a day. More than a quarter (27%) of teens use blogging services (online diaries) once a week or more, with one in 10 visiting blogs on a daily basis.

The NCH Get IT Safe (2006, N=1,003 parents and N=1,003 young people aged 11 to 16) found that, as far as blogging is concerned, only 1% of parents think that their children are blogging, whereas the actual percentage of children blogging is 33%. Also, 67% of parents do not know what a blog is. Quite different conclusions are reached with regard to instant messaging (IM) and parent's degree of awareness: 79% of children said they use IM regularly and while 78% of parents think their children use this form of online communication regularly, one third (29%) don't understand what instant messaging is.

The Ofcom Communication Market (2007) reports that 38% of children aged 5 to 15 use the Internet for fun, 34% to find out or learn things, 18% for contact with other people, 4% just to pass the time and 2% to relax and to keep up to date with news or sports. The study remarks that there is a shift in the main reason children give for using the Internet as they get older. There is a decrease of the number of those who use the Internet for fun (60% of 5 to 7 year olds compared to 26% of 12 to 15 year olds) and an increase in those who use it primarily to keep in contact with other people (1% of 5 to 7 year olds compared to 31% of 12 to 15 year olds).

This latest Ofcom study argues that children are at the vanguard of the convergence of media and telecoms technologies. The study reports that in 2007 more than half of the youth aged 15 to 24 download music files, movies or video clips (55%), 40% play games online/interactively, 31% use social networking sites, 27% watch videoclips/webcasts, 18%

listen to the radio and 10% watch TV programmes on the Internet.

Of particular interest is the finding that a significant proportion of older children (aged 12 to 15) are using the Internet to watch and download user-generated and professionally packaged audio and audio visual content. Of the children aged 12 to 15 who have downloaded or viewed a content type from the Internet, 41% download and watch music videos, 34% videos made by people/the general public like on You Tube, 25% clips from films or TV programmes and 20% whole films of TV programmes.

UKCGO findings:

Age is positively correlated with the range of online opportunities taken up (12 to 17 year old Internet users; $r=0.29$). Livingstone and Helsper (2007) show that, in general, opportunity take-up increases with age: those who are older take up more opportunities, irrespective of gender and socioeconomic status. However, girls use the Internet in a greater variety of ways than boys at a younger age (9 to 15 years) but boys make broader use of the Internet at an older age (16 to 19 years).

Livingstone et al. (submitted) found that age has a direct influence on teenagers' online opportunities over and above the beneficial influence of better access, use and skills.

The Ofcom Media Literacy Audit found that in 2005, whilst using the Internet for schoolwork and for playing games are the top two uses for children in each age group, children aged 12 to 15 make a broader use of the Internet than those aged 8 to 11, with significantly higher levels of use for each of the uses except for sports news. The following graph presents the results by activity:

In terms of opportunities taken up online among 12 to 17 year olds, the UKCGO survey found no overall gender differences in number of opportunities taken up, and this offers little support for the popular idea that girls are less interested, confident or skilled online. However, these averages mask some variation in the particular activities online: compared with boys, girls were more likely to visit civic sites, use email and get careers and educational information, while boys were more likely to download music and video, play games, shop, look for news or information on computers, and make a website.

There was also an interaction between gender and age (Livingstone and Helsper, 2007): among younger children, there is little if any gender difference in opportunities taken. However, by the early to mid-teens, by which time the number of opportunities taken up is expanding, a gender difference has opened up, with the girls reaching a plateau at around 6 or 7 opportunities (from a list of 31) while boys continue to expand their online opportunities until they too reach a plateau by the age of 16 to 17 years. The drop in opportunity taking evident for both genders by 18 to 19 years probably reflects the lower levels of access and use already noted among this cohort.

In the UKCGO survey, socioeconomic status made a difference in several ways. Middle class teenagers were more likely to contribute to message boards, vote or sign a petition online, to visit civic sites, to use instant messaging, shopping, looking for leisure information and news. Working class teenagers were only more likely to use chat rooms.

Overall use was also stratified (Livingstone and Helsper, 2007):

Table 6: Extent of Internet use, by demographics

	Frequency of Internet use (scale 1-8)	Years of Internet use	Average time online (scale 1-7)
AB	6.26	3.8	3.7
C1	6.06	3.7	3.6
C2	5.97 **	3.3 **	3.5 **
DE	5.45	3.4	3.3
Average	5.93	3.6	3.5
N=	1511	1229	1459

Base: All 9-19 year olds in UKCGO survey (N=1511).

* Differences significant at $p<0.05$.

** Differences significant at $p<0.01$.

The Ofcom Media Literacy Audit study found in 2005 that children with Internet at home from minority ethnic groups are significantly more likely to use the Internet in the living room (68%). Overall, 44% of children aged 8 to 15 use the Internet most often in the living room, and 15% in their bedroom. Also, children from minority ethnic groups are significantly less likely to be solitary Internet users (5% of all who use the Internet at home, compared to 11% overall), which is unsurprising given the findings that lower levels of access to the Internet and lower levels of having Internet access in the bedroom. Those in low-income households are also significantly less likely to be solitary Internet users, at 2% of all who use the Internet at home. In terms of time spent on the Internet, children from minority ethnic groups have a significantly lower volume of use, 5.1 hours per week compared to 6.2 hours across the UK. As far as online activities is concerned, there is only a partial disadvantage for children with a rather low socio-economic status. More specifically, children from minority ethnic groups are significantly less likely to use the Internet for downloading music (18% compared to 30% across all using the Internet at home), auction sites (2% compared to 17%), and listening to radio (4% compared to 11%), but significantly more likely for sports news (27% compared to 16%). On the other hand, those in low-income households do not differ significantly in the uses they make of the Internet.

The UKCGO survey found, for 12 to 17 year old regular Internet users, a positive correlation between socioeconomic status and online skills ($r=0.14^{**}$) and self-efficacy ($r=0.08^{*}$). However, this is mediated by access. In other words, those who differ in SES but have equivalent home access to the Internet do not differ in skills/self-efficacy.

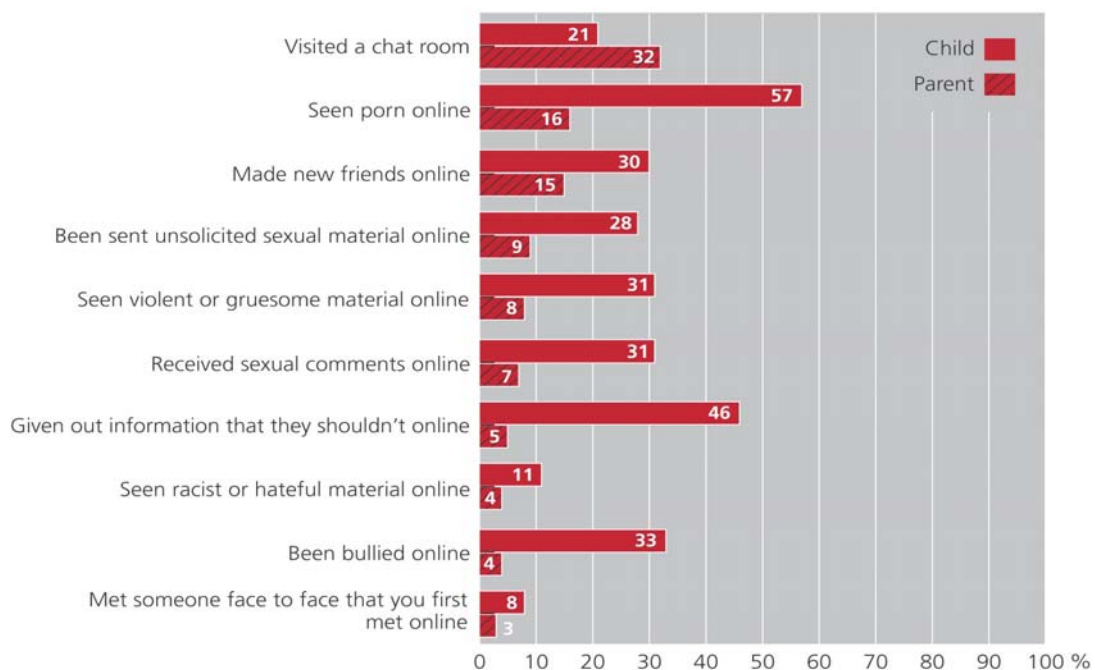
The Ofcom Media Literacy Audit found that in 2005 children aged 12 to 15 from minority ethnic groups are less aware of illegal downloading of films, music and computer software on the Internet (at 65% compared to 76% of children aged 12 to 15 across the UK).

1.6 Risks experienced by children online

UKCGO findings – for risks as reported by children and parents:

Figure 4: Risks on the Internet: parents' and children's views (UKCGO, 2004)

Figure 8: Have you/has your child done these things on the internet? (Multiple response)



Base: All 9-19 year olds who use the internet at least once a week (N=1,257); Parents of 9-17 year olds (N=906)

More details are provided in the table below, for 12 to 17 year olds only:

Table 7: Experience Of Online Risks

Item (Do you/have you....?)	%	Item (Do you/have you ...?)	%
Give info about yourself to be able to win a prize on the Internet	72	Visited a site with violent or gruesome pictures on purpose	14
Give info about yourself to another person that you have not met face to face	46	Ended up accidentally on a site that was hostile or hateful to a group of people	10
Seen pop-up adverts for a porn site while doing something else	44	Been sent porn from someone you know	9
Ended up on a porn site accidentally when looking for something else	41	Visited a porn site on purpose	9
Know someone that you only talk to online using email, IM or chat	36	Met anyone face to face that you first met on the Internet	9
Someone ever said nasty or hurtful things to you	33	Been sent porn from someone met online	3
Received pornographic junk mail by email/instant messaging	28	Visited hostile or hateful site on purpose	3
Ended up accidentally on a site with violent or gruesome pictures	27		
Average number of risks: 4			

Base: UK 12-17 year olds who use the Internet at least once a week (N=789).

The Ofcom Media Literacy Audit found that in 2005 16% of 8 to 15 year olds claim to have come across something 'nasty, worrying or frightening' online. Also, across all children who use the Internet, 4% last came across something of concern to them within the last week, namely one in four of all who have ever come across something of concern to them.

As far as online risks perceived by parents is concerned, 75% of the parents of 8 to 11 year olds and 72% of the parents of 12 to 15 year olds state that they are worried about their child seeing inappropriate things on the Internet.

NCH Mobile Bullying Survey (2005, N=770 11-19 year olds) found that in 2005 20% were bullied via text/Internet/email (14% by mobile text messaging, 5% in Internet chat rooms and 4% via email). 73% knew the person; for 26% it was a stranger; 10% had a photo taken of them that made them feel uncomfortable/embarrassed/threatened; 17% of those said it was sent to others. 11% said they'd sent a bullying or threatening message to someone.

An investigation into cyberbullying (2005, N= 92 students, 11 to 16 years old) found that in 2005, 22% had been victims of cyberbullying at least once and 6.6% had experienced being cyberbullied more frequently. MSN Cyberbullying Report found that in 2006 11% of 12 to 15 year olds were cyberbullied (18% girls, 7% boys), 74% of those told no one, 62% know someone who's been bullied online and 1 in 20 admit to bullying someone else online. The most popular type of cyberbullying is when unpleasant rumours or threats are received via email or IM with 62% of children aged 12 to 15 having experienced that. The National Bullying Survey (2006; N= 4,772 children; 2,160 parents; 323 teachers; 1,323 adults) found that in 2006 cyberbullying was an issue for 7% of young people who suffered Internet abuse, received unpleasant emails or instant messages and phone bullying by text message.

The Eurobarometer survey of 2005/6 found that 15% of parents/guardians think that their child has encountered at least some harmful or illegal content on the Internet.

UKCGO findings for 12 to 17 year old Internet users:

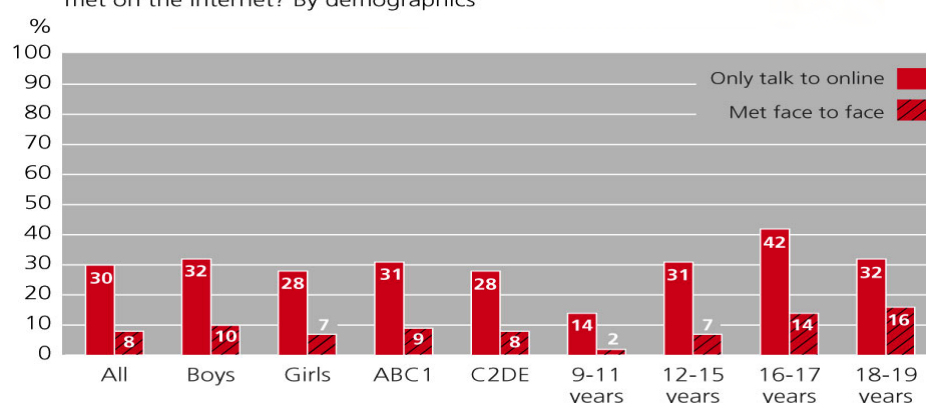
Age is correlated with range of online risks encountered ($r=0.26^{**}$). Looking individually across risk, most risks are more commonly encountered by older than younger teens, this including content, contact and privacy risks.

However, Livingstone et al.'s (submitted) path analysis found that there is no direct influence of age on online risks. Instead, in addition to a direct influence of age on opportunities, there

is an indirect influence of age on opportunities as mediated by access, use and skills. This suggests a virtuous circle of benefits gained both by older children and, comparing within age, by those with better access. Although these variables do not directly predict risks, since opportunities and risks are positively related, the positive effect of age on opportunities is accompanied by a greater likelihood of risky encounters. In short, older teens do more online of a beneficial nature, and this indirectly leads them into more risky experiences.

Figure 5: Risks on the Internet: strangers (UKCGO, 2004)

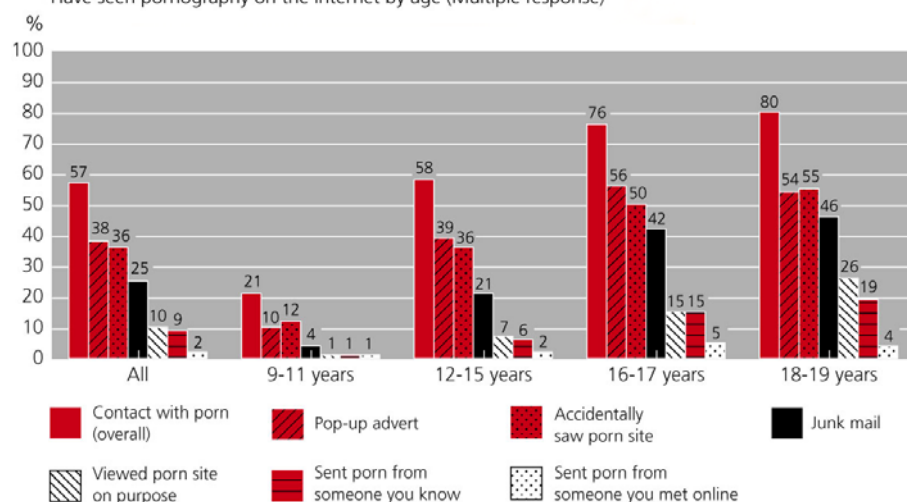
Do you know someone that you only talk to online using email, IM or chat?/ Have you ever met anyone face to face that you first met on the internet? By demographics



Base: 9-19 year olds who use the internet at least once a week (N=1,257)

Figure 6: Risks on the Internet: pornography (UKCGO, 2004)

Have seen pornography on the internet by age (Multiple response)



Base: 9-19 year olds who use the internet at least once a week (N=1,257)

The Ofcom Media Literacy Audit found that in 2005 it is more common for 12 to 15 year olds (19%) than 8 to 11 year olds (14%) to claim to have come across something 'nasty, worrying or frightening' online. On the other hand, the investigation into cyberbullying for the same year found that there were no significant differences related simply to age. A significant interaction between age and gender was found in relation to the effects of email bullying, and the use of instant messaging, which showed contrasting opinions between boys of different age groups. For instance, older boys are more likely to bully others by instant messaging than younger boys, whereas girls' responses to the question remained fairly consistent across age groups. Also, younger boys were the least likely to bully others by instant messaging. However the sample of this study is particularly small and therefore the findings reported must be treated with caution.

Livingstone et al. (submitted) conducted a path analysis which shows that, over and above the direct effects of age and SES, teenagers with better access (especially, more access locations) make more use of the Internet and gain more online skills and self-efficacy. Since there is also a strong positive correlation between online opportunities and risks, the more opportunities a teenager takes up, the more risks she or he is likely to encounter. This analysis (among 12 to 17 year olds) suggests that as younger children gain online access, they will encounter online risk more, precisely because they will take up more opportunities.

The UKCGO findings for online risks were that boys were shown to encounter more risks. Specifically, boys are more likely to encounter online pornography, both accidentally and on purpose, and more likely to seek out violent or gruesome content. Although boys are more likely to give out personal information online, girls are more likely to have been bullied online. The Ofcom Media Literacy Audit found that in 2005 boys are more likely to state that they had come across anything that they had found nasty, worrying or frightening on the Internet than girls. As shown in Figure 9, 16% of boys aged 8 to 11 stated that they had come across nasty, worrying or frightening online content compared to 12% of girls in the same age group, and 20% of boys aged 12 to 15 stated so compared to 17% of girls in the same age group:

The investigation into cyberbullying found that in 2005 girls were significantly more likely to be cyberbullied than boys. Girls score higher, not just on overall cyberbullying, but in many of its subcategories, including phone call, text message and email bullying. No boys reported being bullied in chat rooms or by instant messaging. The MSN Cyberbullying Report found that in 2006 girls were twice as likely to know someone or several people that had been cyberbullied (at 34% compared to 17% of boys), as well as more likely than boys to have been victims of cyberbullying themselves (at 18% compared to 7% of boys).

The UKCGO survey found that SES makes little difference to the experience of risk, though middle class teens are more likely to encounter pornographic or hate content accidentally. The correlation between SES and range of risks encountered is low but significant ($r=0.08^*$), and is more because middle class teens have better access and opportunities than working class teens because they seek/encounter more risk for other reasons.

The Ofcom Media Literacy Audit concluded that in 2005 amongst children aged 12 to 15 who have been taught about the Internet at school, the proportion of those who have come across anything of concern does not differ from the average for this age range (19%).

1.7 Internet regulation and promotion

There are a number of initiatives in this field. The Home Office Task Force on The Protection of Children on the Internet (initiated in 2001) brought together the key industry (Internet and mobile), child protection, regulators, academic research and law enforcement stakeholders to monitor and advise on child safety issues online. It established a number of effective subgroups – one monitoring research, one that produced consensual and widely adopted guidelines on chat rooms, one advising on the above public awareness campaign, one on moderation, and one, currently meeting, on social networking sites.

The mobile operators' code of practice (agreed in 2005) was another key instance of multi-stakeholder collaboration reaching agreement, as part of self-regulation (but monitored by the Home Office), in this case agreeing an opt-in policy (dependent on age verification rather than an opt-out policy) for adult content on mobile phones. It also ensures adequate safety information is available to parents and children.

CEOP (the Child Exploitation and Online Protection Agency) was launched in 2006 as a new Government-sponsored multi-agency body, managed by the police, and involving academics, industry, children's charities, etc. in a multi-stakeholder collaboration that seems unique in Europe (some of its functions are dealt with by different agencies in other countries, but some are not covered at all in other countries). CEOP should become an important interface between law enforcement, industry, child protection, and government policy, identifying

trends, raising awareness, bringing them to the attention of ministers and providing relevant evidence, as well as tracking down perpetrators and dealing with victims. Hence CEOP assembles research in the field, but also is kept informed of trends by the police. It will also commission some research. It gives advice to the courts to help implement the law. For instance, there is a law against trading images online. CEOP is researching this to provide background information for judges to assign proportionate sentences they need some evidence relating to this phenomenon (e.g. how many images people trade, how much trading takes place). In addition, CEOP tries to influence industry. In their 'Safer by Design' initiative, they are advising how firms can modify their game or chat environments to make them safer for children by design (e.g. by incorporating the deterrent of having a law enforcement presence if players press this button).

In 2003, the Office of Communications (Ofcom) was formed, following the Communications Act 2003, to provide a converged and unified regulatory framework for a converging sector (especially, converging across telecommunications, broadcasting and spectrum). The approach is largely that of an economic regulator aiming to provide light touch regulation and to encourage self-regulation. At present (though this may not continue), Ofcom does not seek to regulate the Internet (though it does regulate mobile communication). However, it has some public policy objectives. Ofcom is an evidence-led regulator, and is quickly establishing itself as the provider of major amounts of up-to-date market and consumer information on access, use, attitudes, complaints, concerns, skills, etc. regarding all media, including online.

As regards legislation, 'illegal content' is addressed by the IWF (Internet Watch Foundation). The main laws relate to sexual representations of minors under 18 (i.e. possessing the image itself is illegal) and incitement to racial hatred (i.e. encouraging an act). The main regulation relating to 'harmful content' is Ofcom's (the regulator's) broadcasting code – this includes a definition of content harmful to children. The BBFC (British Board of Film Classification) also has classifications of computer games and films, which may yet be extended online (i.e. they do not apply at the moment).

At the European level, the Audio-visual Media Services Directive text approved and is about to be signed. This has a sentence on harmful content. It might be that UK legislation is quite dense, with 10 to 12 pieces of legislation that refer to images. But one has to be careful because not all of them are implemented or upheld and there is a question about how much any of them apply to online content. That said, in general, although some countries have stricter laws than the UK (e.g. Ireland has laws about possession of images that are stricter in the UK), the UK has increased legislative structures in recent years. The 2003 Sexual Offences Act made grooming a child online for sexual purposes (in chat rooms, email, instant messenger, etc.) illegal, and the grooming laws gained a high profile in the press; other countries in the EC are now considering passing similar regulations.

Turning to police enforcement, the British police have a unit specifically looking for sexually abusive images of children circulating on the Internet and there have been some high (media) profile cases of campaigns by this unit and cases of celebrities who were found to have these pornographic images on their computers.

The history consisted of a number of stages: (a) first let the market operate freely, followed by (b) various community initiatives to make the Internet accessible in libraries, schools and dedicated community centres and, now, (c) the Government is focussing on home. In 1997 the *National Grid for Learning* was launched to get the Internet into all schools by 2002 – this also promoted libraries' access, and training in using online resources for both teachers and librarians. Hence the UK was ahead of many other European countries in getting the Internet into schools in the late 90s. Ten years ago, the 'UK Online' initiative, led by the Office of the eEnvoy (part of Cabinet Office) proposed that one should never be more than a few miles from an Internet connection. This was the last community initiative and included both online centres and adult education courses. At the time the Government was thinking in terms of promoting community access (e.g. libraries, kiosks) more than private access. Home access is currently being promoted by the *Ministerial Task Force for Home Access to Technology for Children*, which aims to reach the bottom 20-25% of children who do not yet have Internet access from home.

As background to awareness issues, policies regarding Internet safety and awareness for children tend to be led either by the Home Office, and now CEOP (as above) and/or by the DCFS (Department for Children Families and Schools – this recently replaced the DfES, or Department for Education and Skills). There are some tensions between these two approaches, as the former is concerned with preventing serious crime and the latter is concerned that safety considerations are not forgotten when initiatives to widen and equalise Internet access for educational purposes are developed. An example of the latter is the Computers for Pupils scheme from the DCFS Technology Futures Unit (£60m in 2006-7 to buy equipment and Internet connectivity to the poorest pupils in 1,000 schools in 108 local authorities). The Home Office approach tends to focus on children's leisure activities online, mainly at home, and primarily addresses parents. The DCFS approach tends to focus on educational/school activities online, and primarily addresses teachers. Attaining coordination across these two major ministries can be hard to achieve.

The DCFS is significantly informed by the British Educational and Communication Technology Association (Becta), which conducted nation-wide surveys of school Internet use in 2001 and 2002, which advises all schools on Internet safety, and which introduced an Internet Surfing Proficiency Scheme a few years ago (one that goes beyond the European Computer Driving Licence). Between these two approaches, various think tanks (particularly IPPR and Demos) try to draw attention to the latest controversial or risky issue, in order to ensure adequate initiatives result.

The regulator, Ofcom, is charged with developing media literacy. Ofcom defines media literacy broadly as 'the ability to access, understand and create messages across a range of media', and for this policy, the Internet is explicitly included. 'Access', in this definition, is taken to include the ability to regulate access to unwanted content or services as well as to gain access to desired services, and includes a wide range of parental and child awareness and protection issues. Ofcom has thus far commissioned literature reviews of children's and adults' media literacy research, major national audits of children's and adults' levels of media literacy, a series of multi-stakeholder meetings to develop policy, and is planning to expand its activities in this area.

Other, specific, awareness raising initiatives:

- a) The Home Office (the Government ministry concerned with security and crime) has recently spent £4m (£6m) on a major public safety awareness campaign (see www.internetsafetyzone.com).
- b) Having bid to be the UK node for INSAFE, CEOP is planning a risk awareness campaign for 11 to 16 year olds which also involves gathering information on what they do online and their experiences. It also evaluates other awareness raising programmes (e.g. by NGOs).
- c) According to the EU Kids Online UK advisory board, other EC countries may not be so advanced as in the UK, either in terms of direct provision for safety and awareness or in terms of collaboration across stakeholder groups. However, there are many attempts to spread good practice – via the EC, the Council of Europe, the Virtual Global Taskforce, the INHOPE and INSAFE networks, etc.

The children's charities and related NGOs (e.g. consumer representatives) are active in this area and regularly commission new research to draw attention to key challenges to children's safety from Internet/mobile technologies – examples include the recent bullying survey, the activities of Childnet International, Barnardo's research on child victims of online grooming, etc. CHIS (see section 3.2) lobbies for them collectively, while charities like Barnados also lobby separately. There was a concern about child abuse images in 1994/5 and this lobbying originally led to the setting up of the IWF in 1996. 'Stranger danger' in Chatrooms was also an early risk that was discussed and was the basis for the report *ChatWise Streetwise* in 2001. This was produced by a consortium of industry, charities and the Government. It led to Home Office Task Force in 2001.

CEOP is now proposing that all ISPs, charities, etc. should include a 'report abuse' button that connects a user directly to CEOP and, thereby, to the police, in order to ensure that those encountering online risks of unwanted contact can be attended to.

1.8 Parental mediation

UKCGO findings:

Active co-use was fairly widespread: two thirds of parents talk to their child about Internet use, nearly half watch the screen and one third stay nearby when their child is online. Further, a sizeable minority of parents apply various interaction restrictions, banning their children from using email (43%), downloading (17%), or using chat rooms (13%). Technical restrictions were also implemented by a fair minority, including 33% with filtering software installed and 23% with monitoring software; however, 20% did not know or were not sure whether a filter was installed, suggesting some limitations on parental skill. Last, some monitor the computer after the child has finished using it, with 30% checking sites visited and 17% checking emails. Active co-use is, it seems, the favoured strategy among parents, though restricting teenagers' activities is also common.

Figure 7: Restrictive mediation (UKCGO, 2004)

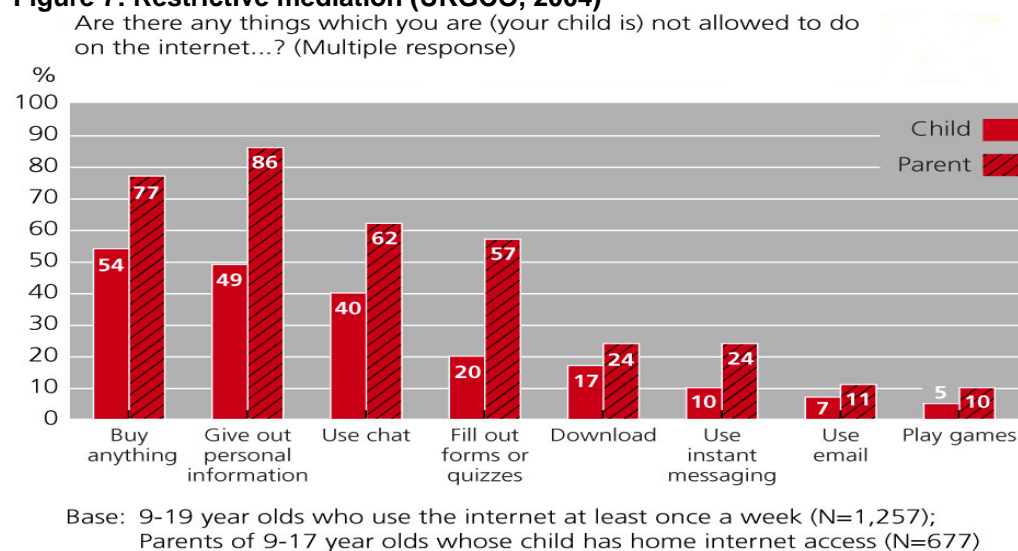


Figure 8: Active/co-use mediation (UKCGO, 2004)

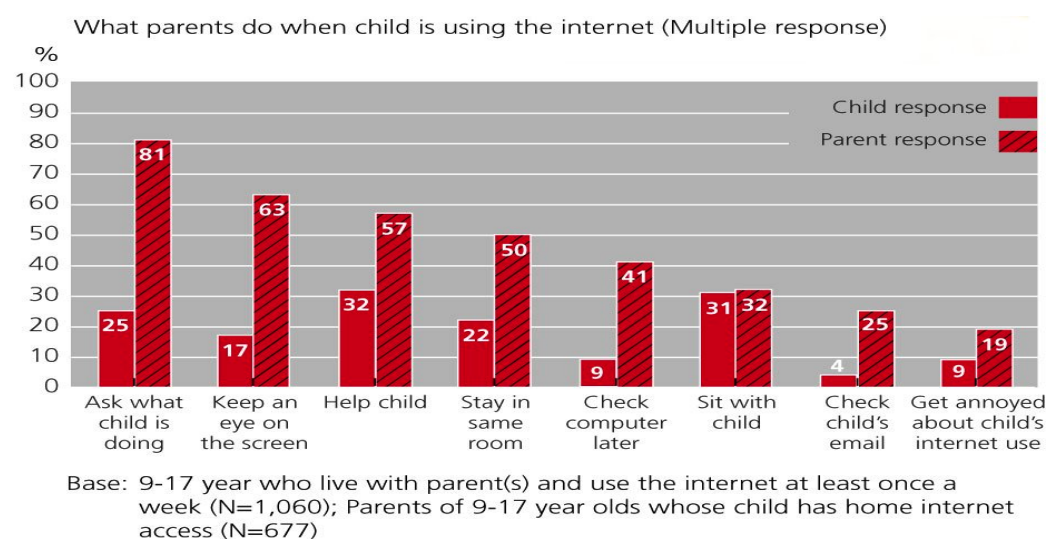
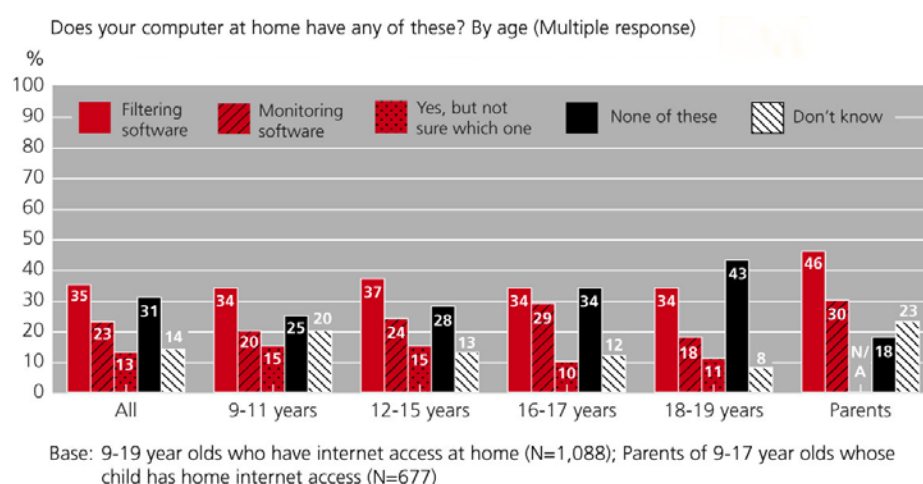


Figure 9: Technical solutions (UKCGO, 2004)



The Ofcom Media Literacy Audit:

- **Restrictive mediation: rules set**

The Ofcom Media Literacy study asked all parents of 8 to 15 year olds whose children use the Internet whether they mediate or establish any rules about the access their child has to the Internet. The children aged 8 to 15 who use the Internet at home were asked whether their parents do anything or have any rules about them using the Internet at home. The responses given by parents show that they are likely to over-claim the existence of rules, and children to under-claim.

The big majority of parents (over 80%) of children who use the Internet report some rules around their child's access, with rules relating to content nominated by most of these parents (78% of parents overall and 60% of children aged 8 to 15). After any and content related rules, significant percentages have rules concerning the location of the computer, rules about length of time spent online and finally rules concerning downloading or purchasing.

- **Technical solutions: blocking software**

The Ofcom Media Literacy study also asked parents whether any controls are set or any software is installed on the computer to stop the children viewing certain types of websites. Half of all parents have some kind of blocking in place to stop their children viewing certain types of websites.

The parents who have not set any such software they were asked why. Although different reasons seem to apply in different conditions, trust in the child was the main reason supported by that category of parents. Also, one in five parents do not have controls set because they're unsure how to do this or were not aware it was possible.

The Get IT Safe study shows a significant gap in parental mediation strategies, awareness and skills. It argues that in 2006 more than half of all children (53%) were never or hardly ever supervised online by their parents, yet 81% of parents think they know what their children are doing at all times or most of the time on the Internet. More than a third of parents said they don't know how to deny access to specific websites or install parental controls and 40% don't know how to block certain content from being viewed. Children say that nearly 60% of their parents have not mentioned certain websites or types of website they are not allowed to visit. Finally, although two thirds (65%) of parents are confident they can deny access to specific websites, nearly half of children aged 11 to 16 (46%) are confident they can get round them, including 43% of 11 year olds.

The OxiS survey (2007, N=2350, 14+) finds that in 2007 most people with children have rules as regards Internet use. However, the most active/co-use mediation (i.e. sitting with children while they use the Internet) is the least applied one. More popular are restrictive rules that try to prevent contact risks, such as not meeting someone only met online (96%), not giving out personal information (95%), not talking to strangers online (95%), not visiting some sites (93%) or not spending too much time online (88%). Most parents have rules about Internet use at home (60%) and almost one quarter (23%) of parents do not have rules regarding the use of the Internet. Finally, 85% of users and nonusers agree that it is necessary to regulate Internet content for children.

The UKCGO survey found, for 12 to 17 year old Internet users, that age is important: parents implement significantly more rules and regulations for younger than older teens ($F(1,634) = 18.43$, $p < 0.01$) (Livingstone and Helsper, in press).

The Ofcom Media Literacy Audit found:

- **Restrictive mediation: rules set**

The Ofcom Media Literacy study found that in 2005 parents of 12 to 15 year olds are significantly less likely to have any rules, although rules are reported by four in five (at 78% compared to 85% for parents of children aged 8 to 11). The following graph shows in more detail the rules by children age and as reported by parents and children:

- **Technical solutions: blocking software**

Finally, the Ofcom Media Literacy study concludes that although half of all parents have some kind of blocking in place to stop their children viewing certain types of websites, no significant differences by the age of the child.

The UKCGO survey found, for 12 to 17 year old Internet users, that socioeconomic status made a difference: higher SES parents implemented more rules and practices ($F(1,634) = 28.34$, $p < 0.01$), possibly reflecting middle class parents' greater familiarity with the Internet (Livingstone and Helsper, in press).

The Ofcom Media Literacy Audit found that in 2005 parents of children from minority ethnic groups are significantly more likely to have rules for their children (94%). Also, not having parental rules or actions regarding children's use of the Internet is more common amongst parents of 12 to 15 year olds in low-income households.

The UKCGO survey found, for 12 to 17 year old Internet users, that there were no significant differences in the regulation of sons and daughters ($F(1,634) = 0.01$, $p = 0.98$) (Livingstone and Helsper, in press).

The Ofcom Media Literacy Audit concluded that in 2005 the gender of the child aged 12 to 15 years does not relate to whether and the extent to which parents state that they are worried about their child seeing inappropriate things on the Internet. The following graph illustrates the relevant results obtained in the study:

Overall, for the UKCGO survey, looking across restrictive, active and co-use strategies of mediation, increasing mediation does not reduce risks. The UKCGO survey (Livingstone and Helsper, in press), found a negative correlation between a parental restriction and the likelihood of the child engaging in the online activity/risk.

Table 8: Correlation between Activity and Rule Banning the Activity (Child's and Parent's View)

Activity undertaken by child (child's view)	Rule present (parent's view)	Rule present (child's view)
Email	-0.25**	-0.27**
Chat rooms	-0.23**	-0.31**
Instant messaging	-0.25**	-0.28**
Playing games	-0.13**	-0.09**
Downloading	-0.23**	-0.27**
Giving out personal info	0.11**	-0.18**
Buying things	-0.01	-0.32**
Filling out forms	0.01	-0.11**
Filling out quizzes	-0.04	-0.19**

Note I. Parent's view: responses based on parents' survey for parents of 12-17 year olds who, according to their parents, use the Internet and have home access (N=634). Child's view: responses based on children's survey for 12-17 year olds who use the Internet at least once a week (N=789).

Note II. The activities of filling out forms and filling out quizzes online were asked about as separate items, but the existence of a rule that the child is not allowed to fill out forms or quizzes online was asked as a single item.

Further analysis confirmed that instituting interaction restrictions (as perceived by parents, this including a ban on email, chat rooms, instant messaging, online games and downloading) predicts a lower level of overall risk online. Yet this was not specifically a means of reducing privacy or contact risks, as might have been expected. Neither active co-use, though widely practiced, nor software-based strategies (filtering and monitoring) were found to be effective in reducing risk, challenging future research to identify the benefits, if any, of such practices. Further, although it is encouraging that restricting online interactions has some benefits, the costs in terms of reducing teenagers' freedom to interact with peers online must be weighed against the advantages in developing safety guidance directed at parents and teenagers. For teenagers, after all, email, chat, instant messaging, games and downloading are among the benefits of the Internet, so that restricting them keeps teenagers safer at a cost.

1.9 Media literacy

UKCGO findings: Most 9 to 19 year olds (56%) who use the Internet at least weekly consider themselves 'average' in terms of their online skills, though one third (32%) consider themselves 'advanced'. Specifically, 9 to 11 year olds describe themselves as 18% beginners, 55% average 20% advanced and 7% expert. Among 12 to 15 year olds, the figures are 4%, 58%, 33% and 4%, respectively. Among 16 to 17 year olds, they are 2%, 52%, 40% and 6%.

Age (for 12 to 17 year old Internet users) is positively correlated with online skills ($r = 0.27^{**}$ and self-efficacy, $r = 0.12^{**}$) (N.B., the online skills measure covered a range of skills but did not specifically measure self-protection skills).

The UKCGO survey respondents, asked in a private self-completion section of the questionnaire, reported mixed reactions to online pornography: of those Internet users who go online at least weekly and who have come into contact with pornography on the Internet, 54% claim not to be bothered by it, 14% disliked what they saw, 20% were 'disgusted', 8% wished they had never seen it, though 7% thought it was interesting and 7% enjoyed it. In short, half of those who see pornography online claim not to be bothered by it, and a small minority even positively like seeing it. However, a significant minority did not like it, one fifth claiming to have been disgusted. Girls and younger children were more likely to say this: 22% of girls said they didn't like it (8% of boys), and 35% thought it was disgusting (10% of boys). 18% of 9 to 15 year olds didn't like encountering pornography online compared with 8-9% of 16 to 19 year

olds, and 25-28% of 9 to 15 year olds thought it was disgusting compared with 12-16% of 16 to 19 year olds.

Regarding going to offline meetings with contacts first met online, the UKCGO findings were that such meetings are partly risky because children may not tell friends or family that they are going to such a meeting: 45% told their parents and 78% told their friends. Further, they rarely go with an adult (11% went with a parent), though 66% did take a friend with them. It is important to note that, for most young people, these meetings are a positive experience: 58% said that they had a good time, 33% said it was nothing special and only 1% said they did not enjoy it.

The Ofcom Media Literacy Audit showed that in 2005 31% of 12 to 15 years using the Internet at home make at least some checks on new websites (from a prompted list of checks). Those that say they have been taught about the Internet at school are more likely than those that haven't to make these checks (33% compared to 23%). Also, whilst two in three (67%) children aged 12 to 15 who use the Internet at home agree that they trust most of what they find on this Internet, one in five (20%) disagrees, and a further one in ten (13%) is unsure.

The Eurobarometer 2005/06 reports showed that 75% parents/guardians think their child knows what to do if uncomfortable online, 18% think they do not.

The UKCGO survey found a positive correlation between online risks and skills ($r=0.47^{**}$) and self-efficacy/risks ($r=0.24^{**}$). The path analysis showed that the two literacy variables are strongly related to each other, yet they work differently in the path analysis. Online skills (a self-assessment of specific skills) have a positive influence on online opportunities (and so an indirect influence on risks). Self-efficacy (a global self-assessment of skills and self-confidence) has no direct influence on either opportunities or risks. The UKCGO survey also found positive correlations among these variables for 12 to 17 year olds ($r=0.55^{**}$).

1.10 Factors shaping public discourses about the Internet

The charities have been very active individually in creating awareness of risks. In addition, they established CHIS, the Children's Charities Internet Safety Coalition. Most or all children's charities (Barnardo, National Children's Homes, the NSPCC, the National Children's Bureau, etc.) have signed up to this, and its very media-active head is John Carr, who brings considerable media and political attention to issues of child safety online.

In general, the EU Kids Online UK advisory panel noted that having more NGOs in the UK operating in this field of Children and the Internet probably helped to give the topic a higher profile than in some other European countries, since these NGOs lobby hard, often in collaboration also with the Internet Watch Foundation. This has also contributed to a greater awareness of risks as more effort has been spent on raising awareness compared to some other countries. In fact, in the UK NGOs have produced various awareness materials, which some other countries have now asked for so that it can be translated (one of the NGOs had recently received a request from Macedonia asking to use the British NGO's awareness resource).

The research conducted by the NGOs is regularly reported in the British media, and they may be asked to comment on other events (e.g. the break-up of a paedophile ring) – as is clear from the media analysis we have conducted for the 3-country report. Looking at the media coverage, contact and content have the most coverage (not privacy or commercialism). There is also an EC sponsored node, INSAFE, which produces a newsletter in this field (along with some other newsletters from other bodies). Various charities have websites with online advice for parents and children. Some NGOs provide helplines. The NGOs also collaborate (e.g. with CEOP) in staging conferences in this field (e.g. Children and Young People Safe Online, January 2008).

One measure of the 'success' of campaigns might be that UK parents claim to use filters more than any other European countries by a large margin in most cases⁵ (2, 3, or 4 times more, depending on the country being compared).

Some awareness campaigns have targeted parents (e.g. the brochure 'Keep Your Child Safe On the Internet' issued by the Home Office in January 2004). Childnet, by contrast, is an example of an NGO aiming at schools.

Arguably there are few single outstanding events relating to the Internet that everyone remembers or that were turning points in media coverage or public discourses (apart from, perhaps, the case of a US military serviceman who met a teenage girl online and persuaded her to leave her family to go with him). Overall, there is more of a drip effect caused by reoccurring stories about, and especially, paedophilia both offline and initiated through online channels and about child abuse images circulating on the Internet.

2 The Educational system

2.1 General education

The UK data was not included in the European data collected. This may be because there was one study that claimed we have a relatively low literacy rate, but the Government contested how this was measured. Usually Government information (e.g. for businesses looking to invest in the UK) claims we have a high literacy rate (i.e. 99%) but there are paradoxes in that there are also re-occurring 'concerns' voiced by some people (i.e. for the last 20 to 30 years) about falling basic 'standards' in education. This largely depends on the type of education people think we should have.

Overall, 73% of the UK adult population has completed upper secondary education. This is lower than many of those countries with smaller populations in Europe (e.g. Nordic, Low Countries), but higher than some countries of a more comparable size, such as France, Italy and Spain (but not in Germany)ⁱ.

Since the 1990s the UK has seen a massive expansion of Higher Education (HE), moving it from a relatively elite system to a relatively mass one. This has also required a change in the funding of HE. Prior to this change, the state mainly paid for the (smaller proportion of) young people in HE. With the move over to mass access to HE, students have increasingly had to pay for tuition, as in the US system.

The last few years especially have seen ever more testing of children at various ages in order to assess the extent to which they and their schools are meeting standards laid down by the Government. Hence more school time is devoted to preparation for this testing. This creates more time pressures and probably squeezes out time for those parts of education that are not being tested (e.g. sports).

There are now school league tables where schools are rated. Parents have, theoretically, more choice about which schools they can apply to in their catchment areas. But in practice there is more competition to get children into 'good schools' (as measured by these tables). Parents will even move house in order to be in the catchment area of a 'good school', which is indicative of how much parents are concerned about their children getting the right education.

Overall, more money has been spent on education in the last decade under the Labour Government, including money to support IT in schools. There was a drive to make sure that all schools had an Internet connection. Compared to most other European countries (apart

⁵ Eurobarometer, 2006

from Portugal) the UK has the fewest percentage of 15 to 19 year olds in full time or part time education – roughly 75%ⁱⁱ.

2.2 Education and the Internet

To provide a wider historical context to this question, soon after home computers first appeared in the 1980s, there were efforts to make them widely available in school. In fact, in a very unusual move, the BBC commissioned the development of a PC known as the 'BBC Computer' which for many years became the most common one adopted for school. But this is indicative of the support that the Government had from the media in bringing ICTs into education, motivated in large part by wider discourses about the evolving information society. When the Internet became a mass market there was a similar effort to connect up all the nation's schools.

The UK has a specific organisation, Becta, which deals with the introduction and support of ICTs in school (see also 3.2 for a history of Internet promotion in the UK). It provides advice, conducts research, reports on pilot schemes and generally coordinates efforts between Government, local authorities, industry, other relevant bodies and educational practitioners of all kinds, obviously including teachers. Its initiatives range from ensuring that at teacher training level all new teachers have to demonstrate knowledge of technology as a tool for learning, through putting in place a 'national digital infrastructure' to organising a 'Laptop for Teachers' scheme (bulk buying 234,000 laptops so that there was a discount for teachers to buy them).⁶

This year Becta noted that 'virtually all schools have network and broadband connectivity'⁷ and that the policy goal was that by 2008 every child should have access to a personalised online learning space.

Currently, the ration of pupil to PCs is 7 to 1 in primary school (aged 7 to 11) and 3 to 1 in secondary schools (aged 11 to 18). Last year, 41% of pupils had full access to the Internet in secondary schools, 6% had full access in primary schools. 57% of secondary school pupils had access to the Internet under staff supervision, while the figure is 93% in primary schools.⁸

In fact, a UK survey in 2004 showed that (unlike many other European countries) in that year more children accessed the Internet from school rather than from home (99% as opposed to 75% of 9-19 year oldsⁱⁱⁱ). A measure of the importance of education as a motivation for Internet use is that 90% of children in that study report using the Internet for school or college work.

To put this into international comparison, on the one hand we are only in the middle ranks in Europe in terms of percentages of computers connected to the Internet in schools attended by pupils of 15+. However, the countries with high or the highest school connectivity are the Nordic (plus Iceland) and Low Countries (Netherlands, Belgium, Luxembourg, Liechtstein), and these, plus Hungary, have much smaller populations. Compared to larger states, the UK is at a similar level to Germany and Spain, and higher than France and Italy⁹.

In the UK pupils are taught about and how to use the Internet within separate lessons on ICTs and in addition ICTs are used in specific subjects, although the exact use is varied across subjects.^{iv}

⁶ Becta Annual Report, 2007.

⁷ Becta Annual Report, 2007.

⁸ Becta (2006) Survey of LAN infrastructure and ICT Equipment in Schools, fieldwork Nov 2005-Jan 2006).

⁹ Eurydice, 2004.

3 Wider society

3.1 Social change

a) Although the UK has a long tradition of immigration and multiculturalism, when the EU expanded to 25 countries, because of its expanding economy and relative lack of restrictions on foreign EU workers, the UK experienced a substantial and sudden migration of workers from the new member states, especially Poland. This is regularly discussed in the news, one aspect being whether the new migrants have slightly different cultural expectations (e.g. there has been a recent increase in knife crimes. It is illegal to carry knives in the UK, but not in some of the new member states and so migrants do not necessarily realise this). So far there have been no noticeable discussions of how this relates to the Internet.

The last decade has seen sustained economic growth in the UK making it one of the strongest economies in Europe. This was not the case for several decades before where we were often perceived as not doing so well, economically, as some of our (Western) European neighbours.

b) In general, the Government has been positive and proactive as regards the information society. Like many other countries, we have produced our own report in response to the American report on the information superhighway and there has been a policy to establish the Internet in schools and increase the amount of electronic information available in academia and libraries in general (see section 2.2). Government departments have increasingly offered online information and online services (e.g. tax returns can be submitted online; research applications to research councils have to be submitted online) and Local Government has been encouraged to do the same.

c) Occasionally television news refers to other European countries, such as Estonia, as being at the leading edge as regards Internet access and use, but overall there is probably a sense that we are above average in Europe.

There is a long history of measuring class inequalities. Income inequalities grew in the 1980s under the laissez-faire conservative Government. The schools tables constantly measure educational differences, as do health league tables. It is widely recognised that in general the South-East of England is the most prosperous part of the UK, although it also contains some of the most deprived inner-city area within London.

The UK is predominantly urban, related in large part to the early industrialisation that took place here. 9.5% of the population lived in rural areas in 2005¹⁰. This is not a sudden change since it was true most of last century as well. While there are rural communities, very few people are involved in agriculture since many of the farms in the UK are large-scale enterprises which, relative to European farms, employ fewer staff. There is almost no peasant farming. When temporary extra labour was needed for harvesting 50 years ago this used to be done by people from the city, but increasingly it provides work for migrant labour. Many of the people who live in 'rural' communities work in cities and commute. Many of our rural communities are located near to urban areas – meaning for example, that people can easily drive to shops in towns. This blurs the boundaries of what counts as a 'rural lifestyle'.

While there may be a lack of Internet in some rural areas, about 80% of the country had coverage in 2005, which was relatively high compared to other European countries, but behind the Low Countries and some Nordic countries. This expansion in rural areas was high between 2004 and 2005, more than doubling coverage in these areas¹¹. On the other hand,

¹⁰ EC (2005) Digital Divide Forum Report: Broadband Access and Public Support in Under-Served Areas.

¹¹ EC (2005) Digital Divide Forum Report: Broadband Access and Public Support in Under-Served Areas.

when broadband is available in rural areas, the UK has very low take up there – one of the lowest in Europe¹².

In the UK, social class, for market research or Government statistical purposes, is defined in terms of occupation and there has been a long term decline in manual jobs and hence in the size of the working class. What this means for the perception of class is more difficult to say, since there has been an increase in low level service industry jobs, which in the Government statistics are regarded as being middle class.

We have a long tradition of immigration, partly because of the Empire, partly because of industrialisation (e.g. mining for coal in the 19th Century, especially, attracted many people from all over Europe) and partly because of religious tolerance (which brought French protestants and Jews from Germany and Eastern Europe to the UK at different points in time). Despite this, for many decades we nevertheless had more net emigration because so many British went abroad to live in other parts of the Empire and later the Commonwealth (e.g. especially to places like Australia and Canada). But from the 1960s we had a substantial immigration from the Commonwealth in large part to fulfil labour shortages in the UK, and the same has more recently been true when the EU was expanded. This is shown in the higher figures for the UK compared to a range of other European countries¹³.

With this immigration we have had inevitable issues about 'race', and in the last few years, as in many parts of Europe, this has been most focused on the Muslim ethnic groups. However, the wider policy within the UK has for many years been one of 'multiculturalism' (rather than the more 'assimilation' policies of, for example, France). In other words, the contributions from diverse ethnic communities are often celebrated, as in the Notting Hill carnival, the largest street festival in Europe. There are a number of implications of this. One is that – and it would need to be tested – this approach may make the British more sensitive about what might be offensive, about the different values that other groups may have (although some of the media coverage might sometimes cast doubt on this hypothesis). One of our NGOs, the Internet Watch Foundation, was supposed to address the issue of race hate sites on the Internet – but it gets very few calls about this topic. Another observation is that ICTs in general and the Internet in particular, are used by ethnic minorities to keep in touch with social networks in the country of emigration. In fact, some more temporary foreign workers use ICTs such as the mobile phone to manage 'remote parenting' of children left behind in their country of origin.

3.2 Role of the state

To provide a very long-term context, the particular British experience as the first industrialised nation was for many working people a very harsh one. Marx could write about how the laws were shaped under early capitalism drawing on the British case. But this also meant that there was a long tradition of resistance to this in the form of a socialist movement and the emergence of trade unions. It also meant that there was a long reformist tradition searching for evidence of social problems and social issues (e.g. trying to measure poverty in the UK in the late 19th Century before it was considered in many other countries). Hence, we have a research tradition, and even an academic discipline called 'Social Administration', which has collected various statistics for many years. NGOs campaigning for reforms also contribute to this tradition of research (one of the highest profile ones for commissioning research being the Joseph Rowntree Foundation).

Partly emerging from the socialist tradition noted above, ideas and campaigns for more state intervention existed before the Second World War, but many of our institutions such as the National Health Service, National Insurance, free education (i.e. the social democratic welfare

¹² EC (2005) Digital Divide Forum Report: Broadband Access and Public Support in Under-Served Areas.

¹³ OECD 2005

state) emerged with the Labour Government after the war, and these are so established that no political party can think of removing them.

However, there was a break with conventional politics from the late 1970s with the arrival of Margaret Thatcher as Prime Minister. This strand within the Conservative party embraced market liberalism and emphasised individual responsibility, reducing state proscriptions and increasing the responsibility on parents. Even after the many years of Labour government under Tony Blair, the debates about the boundaries of the role of the state continue from this earlier era. This is a complex issue because Conservative critics talk about the 'Nanny State' dictating much what people should do. In many ways, especially in the field of education, health and law and order, the Labour Government has been very interventionist, creating many new rules, targets and guidelines, and it is unclear how much less a Conservative Government would have done. Certainly if anything 'goes wrong' (e.g. someone dies because some state or local government body did not fully do their job) there are always calls that the state or the local authority or the social services should have intervened more. This is the context in which we need to appreciate state concerns about the risks of the Internet, but also state efforts and funding to promote Internet access (for children) (see section 2.2).

In the UK Children Go Online survey parents seemed to regard the State as being responsible for the Internet in that their first choice of action in response to potential risks was they wanted more laws. Schools were the next choice. Better advice for parents came next, implying some responsibility on the part of parents. But expectations of industry (e.g. supply filters, parental controls, monitoring software) were lower down the list.

In general, the UK is regarded as being tolerant of free-speech on a wide range of political issues – moreover, this has been a historical feature at times when more authoritarian Governments restricted free-speech in other European countries. One recent change following 9/11 is concern about and restrictions upon speech that incites religious hatred and there have been some recent court cases relating to this.

On the other hand, our censorship laws, particular relating to sexual matters, have been stricter than some other European countries. For example, some of the sexually explicit material shown on some European channels would be illegal in the UK. This has implications in the field of children and the Internet. Some of the campaigns in the Netherlands would not be allowed here (e.g. suggesting Cybersex is safe). In fact, the images shown in the adverts associated with this Dutch campaign would themselves be illegal in the UK.

4. Other factors affecting children's online experiences

English is the first language. It is worth noting, though, that whereas there appear to be national versions of popular social networking websites like MySpace in different languages, the English version of MySpace connects with more of the world. Hence, British parents could be worried that their children are being groomed by American paedophiles.

The UK has a poor record in teaching European languages in school. On the other hand, many schools include a multilingual population because of (especially recent) migration into the country. Government and social welfare materials are generally produced in multiple languages, since a minority of children have parents with a poor command of English.

One change in the experience of children is related to arguments about children's greater absence from unsupervised public spaces (Livingstone, 2002).^v The related practice of children socialising with peers in their home has been identified as 'Bedroom Culture'. Observing that this is a European and North American phenomenon, partly depending on wealth, this research showed that a high proportion of European children, especially teenagers had their own room (e.g. 82% of 15 to 16 year olds). Indeed, the majority of 15 to 16 year olds claimed to spend at least half their waking life in their rooms (Livingstone and Bovill, 2001).^{vi}

A number of factors shape this experience besides general affluence, some more country-specific than others. For example, in Britain the lack of leisure alternatives for children and youth outside the home has been commented upon (Bovill and Livingstone, 2001).^{vii} In addition, the last decade or two has also seen the process, again perhaps truer in some countries or areas than in others, whereby there has been a growing concern for children's safety in public spaces. The UK study of children and ICTs described how parents felt under pressure to keep their children indoors (Livingstone and Bovill^{viii}, 1999; Livingstone 2002). In the UK, as in many other countries, children's bedrooms have become 'media rich', reflecting in part the need to provide alternatives if children are to be kept off the streets (Livingstone and Bovill, 1999). This includes, for an increasing number, access to the Internet. Although more and more children and young people may be under greater general supervision overall by virtue of being in homes (or other supervised spaces), within the privacy of their bedrooms their access to the online world is less easy to supervise. While these arguments may apply somewhat to the other European countries, there is the question of whether it applies more in some than others, and more specifically in the UK where this research on bedroom culture took place.

A note on risk: UNICEF collects data on a range of risks faced by children – the UK came top (or nearly top) on a range of these: having drunk alcohol two or more times when 11; having used cannabis aged by 15; having had sex aged by 15; having been bullied^{ix}.

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Endnotes

ⁱ Eurostat

ⁱⁱ UNICEF (2007) *An Overview of Child Well-Being in Rich Countries*, Florence, p.20.

ⁱⁱⁱ Livingstone, S. and Bober, M. (2004) UK Children Go Online. Surveying the experiences of young People and their Parents, Report for the ESRC.

^{iv} Valentine, G., Marsh, J. and Pattie, C.(2005) Children and young People's home Use of ICT for Educational Purposes: The impact on Attainment of Key Stages 1-4, DfES Research Report, 672.

^v Livingstone, S. (2002), *Young People and New Media*, London: Sage.

^{vi} Livingstone, S. and Bovill, M. (2001), *Children and their Changing Media Environment. A European Comparative Study*, Mahwah, New Jersey: Lawrence Erlbaum Associate.

^{vii} Bovill, M. and Livingstone, S. (2001), 'Bedroom Culture and the Privatization of Media Use', in Livingstone, S. and Bovill, M. (eds) *Children and their Changing Media Environment. A European Comparative Study*, Mahwah, New Jersey: Lawrence Erlbaum Associates, 179-200.

^{viii} Livingstone, S. and Bovill, M. (1999), *Young People, New Media*, London: London School of Economics.

^{ix} UNICEF (2007) *An Overview of Child Well-Being in Rich Countries*, Florence