

# **InterActive Education Questionnaire: Preliminary Results**

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## **1. Aims of the Questionnaire**

'Learners out of school uses of computers' is the subject of Research Theme 5 within the InterActive Education Project. The overall aims of this research theme are:

- 1) to investigate young people's use and access to ICT outside school in order to develop awareness of this activity and how it might be utilised and augmented;
- 2) to investigate the implications of differential out of school use of computers for homework strategies and additional provisions;
- 3) to characterise the relationship between parental expertise and young people's expertise;
- 4) to investigate how young people make use of the school and local authority's web pages;
- 5) to investigate students' differential access to and use of computers in out of school settings as a consequence of social class, gender and race.

The specific aims of the questionnaire carried out as part of this research theme were to:

- 1) Provide baseline data on technology ownership, access and use outside school amongst the sample;
- 2) To identify patterns of ownership, access and use outside school along the lines of age, gender, ethnicity, socio-economic status;

## **2. Design, Data Collection and Sample**

### **2.1 Design and Piloting**

The questionnaire was designed drawing on an instrument previously used in the Screen Play Project in 1998. The Screen Play questionnaire was altered to reflect categories of computer use which had emerged during the qualitative process of that project. The questionnaire also carried more detailed questions on internet and mobile phone use, and on the location and access to computers in the home. The questionnaire was initially tested with colleagues and then the instrument and analysis were piloted in a local Bristol primary school in May 2001.

### **2.2 Data Collection**

The data collection was carried out in the summer and autumn of 2001. A sample of students from 4 primary schools, 5 secondary schools and 1 FE college were surveyed. The year groups were selected to give access to students in different stages of their schooling, covering key stages 2,3 and 4. The data collection was conducted as follows:

School	Date	Year Groups	Method of Administration
Primary 1	25/06/01	5	3 researchers and teacher present in classroom
Primary 2	25/06/01	5	3 researchers and teacher present in classroom
Primary 3	26/06/01	5	3 researchers and teacher present in classroom
Primary 4	24/06/01	5	3 researchers and teacher present in classroom
Secondary 1	25/06/01 – 25/07/01	7,10, 12	Detailed instructions provided to form teachers and questionnaires administered during PSE time
Secondary 2	25/06/01 – 25/07/01	7, 10	Detailed instructions provided to form teachers and questionnaires administered during PSE time
Secondary 3	25/06/01 – 25/07/01	7, 10, 12	Detailed instructions provided to form teachers and questionnaires administered during PSE time
Secondary 4	25/06/01 – 25/07/01	7, 10, 12	Detailed instructions provided to form teachers and questionnaires administered under exam conditions
Secondary 5	25/06/01 – 06/07/01	7, 10	Detailed instructions provided to form teachers and questionnaires administered under exam conditions
FE College 1	01/10/01 – 15/11/01	12	Detailed instructions provided to class teachers and questionnaires administered during lesson time.

### **2.3 Data preparation and analysis**

The questionnaire data was entered into SPSS by four trained individuals in July/August and December 2001. The preliminary analysis reported in this project consists primarily of descriptive statistics. Full percentages were used initially to identify any variables with high levels of missed responses. Valid percentages are used throughout this report in order to facilitate comparison between different subgroups.

### **2.4 Socio-economic indicators**

In the field of ICT and education there are longstanding concerns that young people from different socio-economic backgrounds may have less access and use of technology, accordingly developing an appropriate technique for identifying socio-economic status is a key aspect of the research design. There are evidently a range of different approaches – some researchers have been known simply to ask children to self-report their class as ‘working’ or ‘middle’ class, with obvious drawbacks. Other methods involve identifying parental education and income. With the range of age-groups that this sample included it was felt more appropriate to identify a question that the large majority of children would be able to answer.

In order to achieve this it was decided to ask each respondent to give their postcode. Postcode sampling is a widely used technique within commercial market research and is used by HEFCE to identify the degree to which universities are widening access. The commercial firm used for this project is the same as that used by HEFCE (Experian) and uses the MOSAIC mapping method. Within this method each UK postcode is attributed one of 52 MOSAIC codes. Each of these 52 MOSAIC codes represents postcodes with different penetrations of income, education, expenditure, housing stock, consumer practices.

For the purposes of this project, where the primary concern was the impact of income and family education on access and use of technology rather than, say county court judgements or car ownership, the 52 codes were ranked in two columns, one referring to the penetration of high incomes within each of the codes and one referring to the penetration of degree level education within each of the codes. These rankings were then collated and a single ranking for the 52 codes was produced, which reflected both income and education factors. These codes were then mapped onto the % of GB population that they represent, and the codes segregated into four categories, each representing a quarter of the GB population.

The categories then represented postcodes within the four quartiles of the GB population in terms of penetration of income and education as follows 1) postcode areas in the top quartile of GB population in terms of penetration of high income and degree level education, 2) postcode areas in the second quartile of GB population in terms of penetration of high income and degree level education, 3) postcode areas in the third quartile of GB population in terms of penetration of high income and degree level education, 4) postcode areas in the bottom quartile of GB population in terms of penetration of high income and degree level education. The postcodes provided by the children were, then, recoded into one of the 52 MOSAIC categories and then recoded again into one of the four categories that we developed.

We can say, then, not that the children necessarily come from high income, high education families, for example, but that they come from high income, high education areas. In the following analysis the data will be reported as: ‘high income, high education areas’; ‘middle- high income, middle-high education areas’; ‘middle-low income, middle-low education areas’; and ‘low-income, low education areas’, or ‘high/middle-high/middle-low/low’ for shorthand.

The level of missing responses to the postcode data, however, do raise some cause for concern as 20.9% of the sample did not provide a postcode, or provided a postcode which was not recognised as correct. The socio-economic data, therefore, refers only to the remaining 79.1% of the sample for whom we can confidently interpret the postcode figures.

## 2.5 Ethnicity

The indicators of ethnicity used in the questionnaire are taken directly from the 2001 census to facilitate comparison should that be appropriate. This provides 15 categories of ethnic background. For the purposes of analysis, these were collated into 5 groups: 'white, mixed, asian, afro-caribbean, other'. The level of missing data for this question does provide some concern as 9.4% of the sample either did not provide a reliable response or did not answer the question. Moreover, given the final low level of minority ethnic groups within the sample as a whole, it was felt that it would not be statistically reliable to conduct an analysis by ethnicity across the full sample, but we could more reliably conduct the analysis within the one school which represented some form of ethnic diversity. Differences by ethnic group, then, will not be reported within this document.

## 2.6 Final Sample Make-up

The make-up of the sample was as follows:

### Gender:

	Frequency	% of sample
Boys	905	49.8%
Girls	905	49.8%
Missing	8	0.4%

### Ethnicity:

	Frequency	% of sample
White background	1402	77.1 %
Mixed background	92	5.1 %
Asian Background	74	4.1 %
Afro-caribbean background	61	3.4 %
Other background	18	1 %
Missing	171	9.4 %

### School makeup

	Frequency	% of sample
Primary 1: St Michaels	53	2.9 %
Primary 2: Two Mile Hill	56	3.1%
Primary 3: Colstons	54	3.0%
Primary 4: Easton	32	1.8%
Secondary 1: Filton	320	17.6%
Secondary 2: Cotham	276	15.2%
Secondary 3: Sir Bernard Lovell	436	24%
Secondary 4: John Cabot	351	19.3%
Secondary 5: Fairfield	154	8.5%
FE College 1: City of Bristol	86	4.7%

### Year Group makeup

	Frequency	% of sample
Year 5	195	10.7%
Year 7	752	41.4%
Year 10	640	35.2%
Year 12	231	12.7%

### Socio-economic makeup

	Frequency	% of sample
High Quartile	436	24%
Middle – High Quartile	319	17.5%
Middle-Low Quartile	525	28.9%
Low Quartile	158	8.7%
Missing	380	20.9%

### 3. Full Sample Preliminary Results

#### 3.1 Technology Ownership

*n=1818, full sample*

The reported levels of technology ownership amongst the sample are very high, with 88% of the sample reporting home ownership of a computer, and 35% of the sample having two or more computers in the home. Computer ownership, it seems, has overtaken console ownership in prevalence amongst this sample, although a still notable 85% have a console at home. The number of consoles in the home, however, is likely to be higher than the number of computers, with 43% of the sample reporting ownership of two or more consoles.

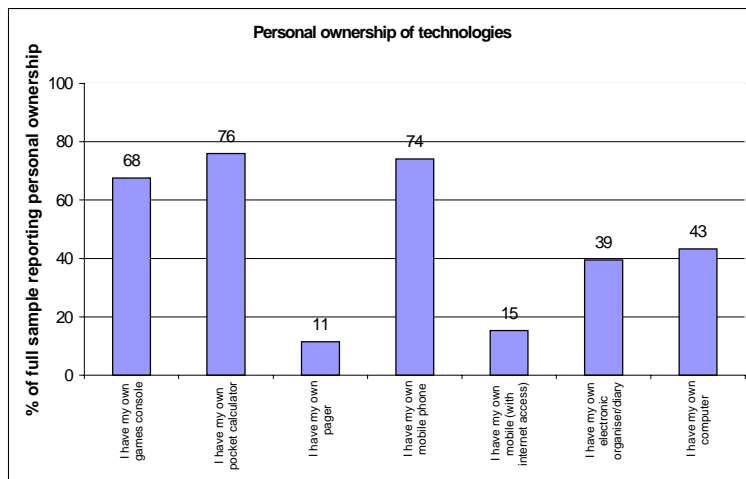


Fig 1. Home Technology Ownership ( *n = 1818, full sample, Valid %s reported.*)

In terms of peripherals, the printer remains the most prevalent, with 85% of children reporting ownership, the majority of those who own printers (76%) however, having only one printer in the household, suggesting that while computer ownership may be proliferating, printers remain attached only to one computer in the home. More 'exotic' peripherals, such as scanners and CD-Writers are also increasing in popularity, although in comparison with printers, they remain relatively unusual, (55% and 29% respectively).

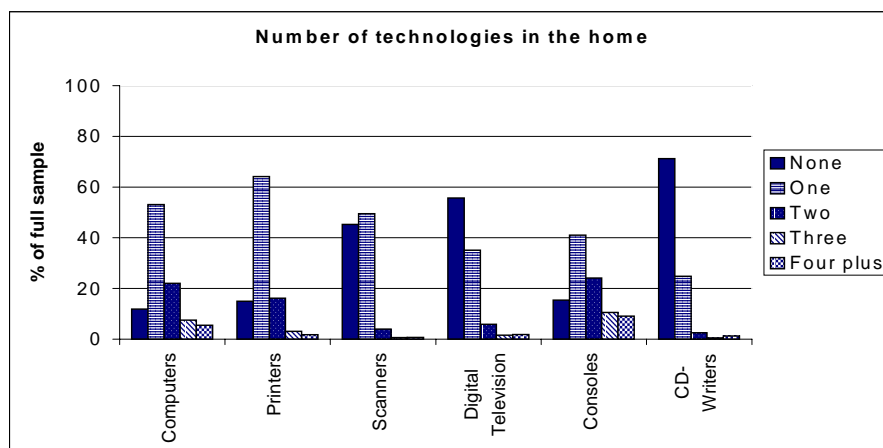


Fig 2: Numbers of technologies owned in the home ( *n = 1818, full sample, valid %s reported*)

The boom in computer ownership over the last two years is also in evidence amongst this sample, with 30% of computer owners reporting that their newest computer was purchased in the last year (2000-2001) and 29% reporting that it was purchased in the year preceding that (1999-2000). The remaining 42% of computer owners report that their computer was purchased prior to 1999. Internet access, too, seems to have jumped amongst this age group, with 73% reporting internet access at home, a major increase on figures from previous surveys over the last 4 years.

When looking at what the young people in the sample report owning ‘personally’, however, a slightly different picture emerges with the lower cost calculators (76%) mobile phones (74%) and games consoles (68%) more likely to be reported to be personally owned than computers (43%). The demise of the pager as a popular personal device is also in evidence, with only 11% reporting personal ownership. Similarly, the web connected mobile phone seems yet to have made a major impact comparatively, amongst this group, with only 15% reporting ownership.

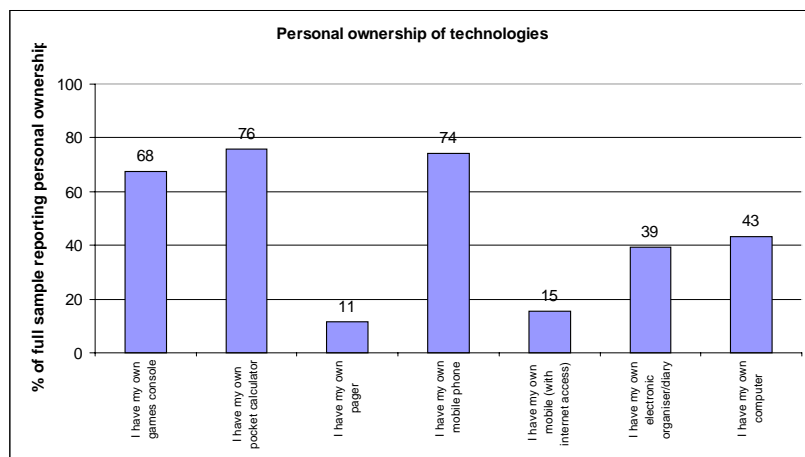


Fig 3. Personal Ownership of Technologies ( n = 1818 full sample, Valid %s reported)

### 3.2 Computer Use Outside School

The respondents were asked to report how often they used the computer outside school in a range of different sites (home, relative’s house, friend’s house, parent’s work, library/museum, youth club, internet café). What was notable from this question was the extent to which regular computer use remains firmly located in the home. Only 12% of the sample reported never using a computer at home and 78% reported using a computer at home at least once a week. Notably, 33% reported using a computer at home every day.

How often do you use a computer (NOT a games console) outside school						
I use a computer	Never	less than once a month	at least once a month	about once a week	2-3 times a week	every day
at home	12	4	5	14	31	33
at a relative's house	44	24	14	12	5	2
at a friend's house	27	26	22	17	7	2
At my parents' workplace	77	11	5	2	3	1
In a library, museum or science centre	58	23	10	6	3	1
At a youth club/youth group	84	5	3	5	2	1
In an internet cafe (cafe with computers)	86	8	3	2	1	1

Table 1 : Computer Use Outside School (n=1818, valid %s reported, rounded up)

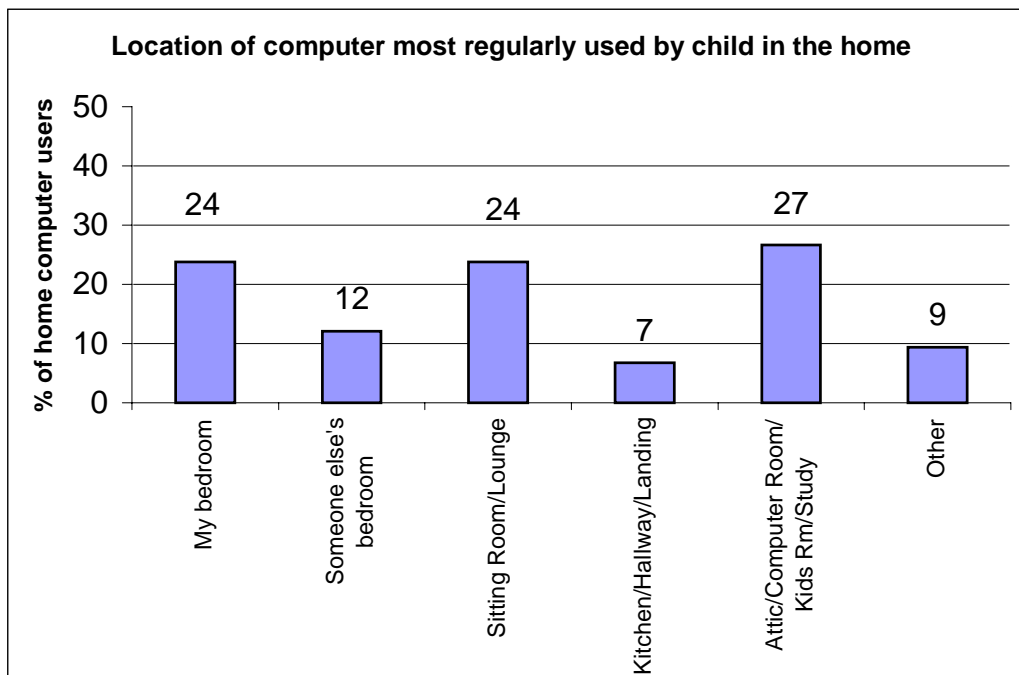
The role of friends and wider family homes as a site of computer use should also not be overlooked, with a quarter of the sample reporting use at a friends’ home at least once a week, and 18% reporting use at a relative’s house at least once a week. In comparison, computer use in other ‘public access’ sites as opposed to private homes, is relatively restricted. (see table 1)

#### 3.2.1 Computer Access in the Home

*n = 1585, children reporting computer use in the home*

The presence of a computer in the home is not, in itself, a reliable indicator of young people's access to or use of a computer in the home. In many households, for example, a computer is a shared resource for many members of the family. From the following results we can see that computer access is not necessarily unproblematic for the young people in this sample.

Only 6% of the children with home computers, for example, report that no one else uses the computer that they use most of the time at home, with 57% reporting that at least 3 other people also use it. Despite this, however, 40% of the children with computers in the home report that they can always use the computer when they want to. A higher figure, however, have to negotiate access, with 41% saying they can use it 'more or less when I want to' and 11% reporting that they can only go on 'from time to time'.



*Fig 4: Location of computer child uses most regularly in the home (n = 1585, children reporting home computer use, valid %s used)*

Interestingly, 24% of children report that the computer they use most of the time at home is in their own bedroom and 12% report that it is in someone else's bedroom. When considering this result alongside the reported numbers of people using computers in the children's homes, this suggests that the child's bedroom, far from being an isolated and discrete space away from the rest of the family, may, through computer use, be a site that many different family members access. The majority of computers most regularly used by the children in the study, however, are located in 'family' spaces within the home, with 24% in living rooms, 27% in attic/computer room/kids room/study and 7% in kitchens/halls and landings.

### 3.2.2 Computer Activities in the Home

*n = 1585, children reporting computer use in the home*

What was notable about the reported computer use of this sample, was the degree to which the home computer seems to have been adopted as a multi-purpose tool, with high levels of use of the computer for *both* 'fun' and 'schoolwork', although 'fun' use of the computer dominates daily usage.

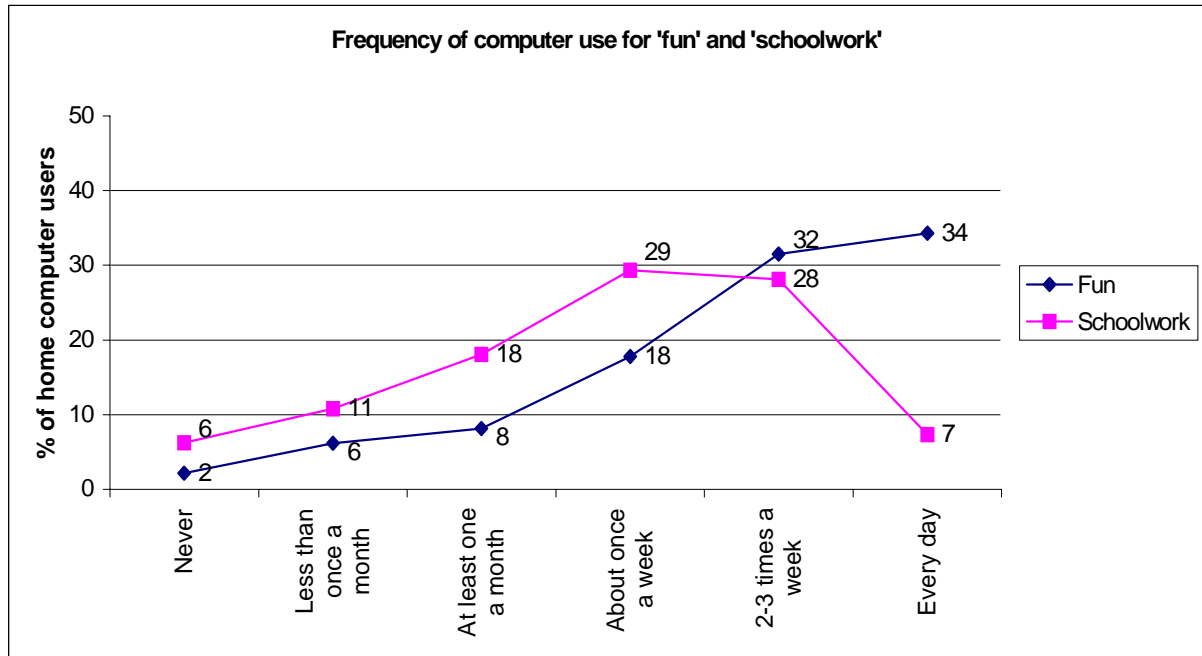


Fig 5: % of home computer users reporting these frequencies of these activities (*n = 1585, children reporting home computer use, valid %s used*)

If we look at patterns of use with a reported frequency of once a week or more, there are clearly activities which are much more prevalent than others – namely, games play and writing (these are surprisingly similar), 'fiddling' around on the computer, and looking up information.

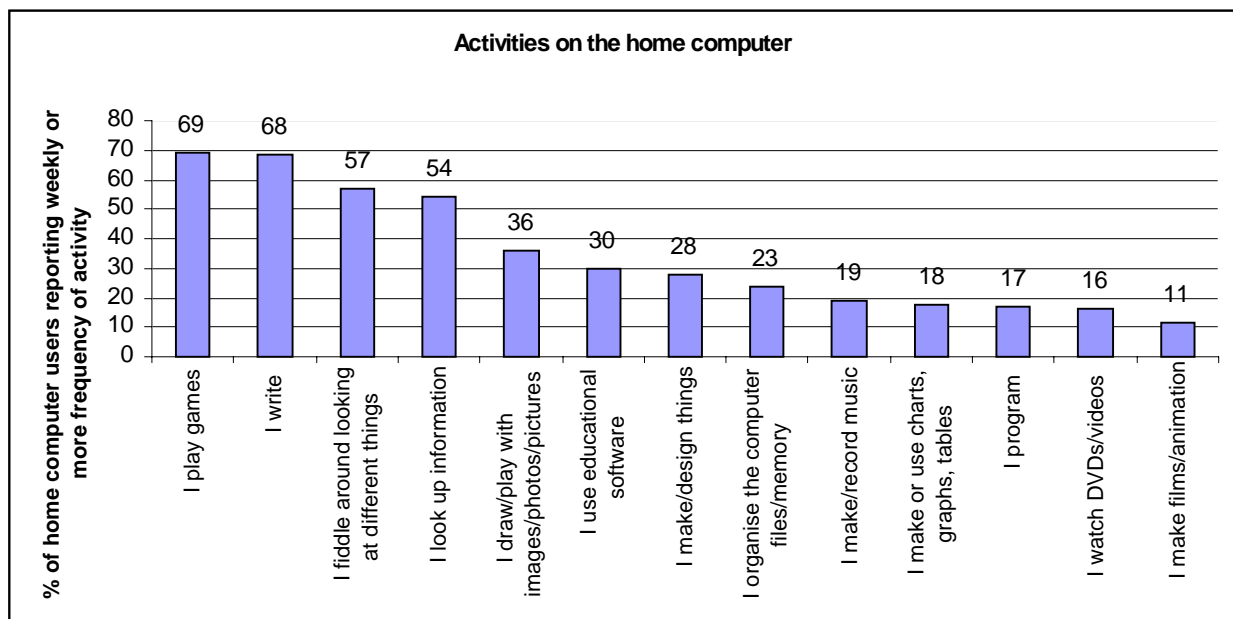


Fig 6: % of home computer users reporting weekly or more frequent use of the computer for these activities (*n = 1585, children reporting home computer use, valid %s used*)

If we look at reported frequency of different activities in more detail, and compare these figures against the reported use of the computer for ‘fun’ and ‘schoolwork’, it is clear that games alone cannot account for activities children report as ‘fun’ on the computer. It also seems that while some activities have become commonplace, such as writing, games play, information seeking and ‘fiddling around looking at different things’, other activities remain relatively rare, such as watching DVDs, making/recording music, programming or making films and animation, with over 60% of home computer users never doing these. We could, however, take a reverse perspective and say that it is surprising how many young people report these activities at all.

<b>How often do you go on a computer at home to do these things?</b>						
<b>On the computer at home</b>	<b>Never</b>	<b>Less than once a month</b>	<b>At least one a month</b>	<b>About once a week</b>	<b>2-3 times a week</b>	<b>Every day</b>
I write	4	10	18	27	29	13
I play games	8	12	11	19	27	23
I look up information	10	14	22	23	22	9
I fiddle around looking at different things	13	14	16	20	23	14
I draw/play with images/photos/pictures	27	18	19	17	14	6
I use educational software	29	21	21	16	11	3
I make or use charts, graphs, tables	29	23	16	10	6	1
I make/design things	31	24	18	14	11	3
I organise the computer files/memory	51	15	11	10	9	5
I watch DVDs/videos	61	13	10	6	6	3
I make/record music	62	11	8	8	7	4
I program	63	12	8	6	6	4
I make films/animation	70	12	7	5	5	2

*Table 2: Types of computer activities at home, n = 1585, children reporting home computer use, valid %, rounded up*

When we consider these results relative to one another, then, it is easy to see a domination of particular types of activities such as writing, information seeking and games. When we consider these results within a wider context of children’s uses of technologies, the range of experiences that the home computer has at least offered at some point, to the home computer users in this sample, is remarkable.

### 3.3 Internet Use Outside School

(*n* = 1818, full sample)

As with computer use outside school, the primary site for internet use remains the home with 58% of the sample reporting internet use at home on at least a weekly basis. The 29% of the sample reporting no use of the internet at home maps onto the 28% of the sample reporting no internet access at home. As for computer use more generally, friends' houses remain an important site for internet use (17% report weekly or more use) and the relatively lower levels of use of public sites remains constant for internet access as for computer access.

I go on the internet	Never	less than once a month	at least once a month	about once a week	2-3 times a week	every day
at home	29	6	7	14	23	21
at a relative's house	60	18	11	7	3	2
at a friend's house	44	24	16	11	5	1
At my parents' workplace	83	7	4	3	3	1
In a library, museum or science centre	71	15	6	4	2	1
AT a youth club/youth group	88	4	2	5	2	1
In an internet cafe (cafe with computers)	88	7	2	2	1	1
Somewhere else	80	7	4	4	2	3

Table 3: Frequency and location of internet use outside school, *n* = 1818, full sample, valid %, rounded up

#### 3.3.1 Internet Access in the Home

(*n* = 1274, children reporting home internet use)

The question of internet access in the home is subject to a range of concerns and conjectures. As a range of devices are launched onto the market aimed at providing internet access via televisions and consoles, the question of exactly *how* young people access the internet, through what mechanisms and with what capabilities becomes a subject of interest. On another level, the degree to which young people should have access to internet content, remains an issue of some concern to policy makers and parents. This section therefore focuses on these two questions.

In terms of the mechanisms of access it is clear that the home computer remains the key mediator of internet access in the home, with 62% of children using the internet at home citing the computer as an internet point. Interestingly, however, other mediating devices are, although in lower numbers, also evident, with mobile phones (12%), digital television (10%) and consoles (7%) also reported as providing access. The question of the degree to which these different access devices provide similar resources for children in using the internet, however, remains open to question.

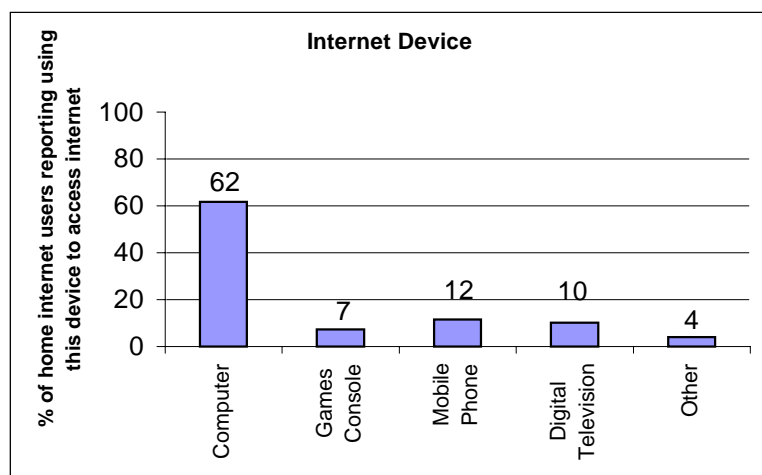


Fig. 7, % of home internet users reporting this device to access internet, *n* = 1274, children reporting home internet use, valid %

Responses to the question ‘what do you have to do before you can go on the internet?’ suggest that telecommunications issues remain a key factor in determining internet access in the home, with nearly 40% of children reporting needing to wait until the phone line is free, and just over 20% reporting needing to wait until the telephone call charges are cheaper. Parental monitoring still seems relatively prevalent, with 30% of children needing to get permission from parents before using the internet (although this may, too, relate to issues of call charging) but only 3% reporting needing to wait until parents could go on the internet with them.

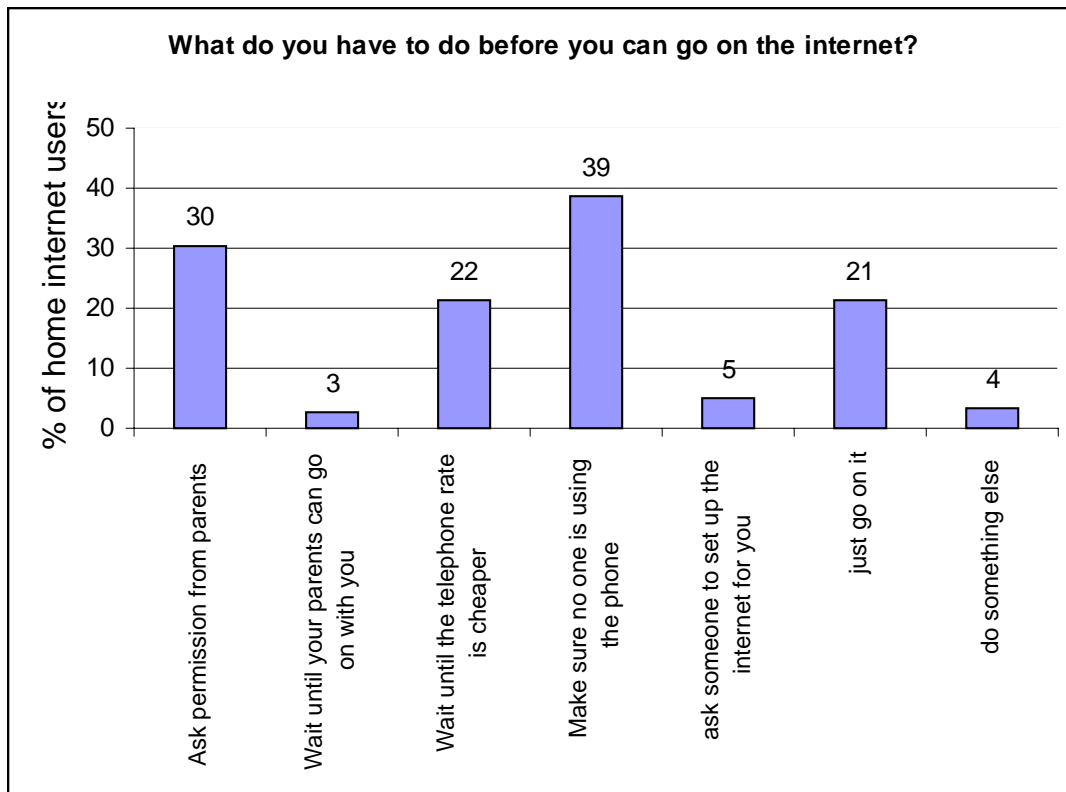


Fig 7. *N* = 1274, children reporting internet use at home, full percentages used.

### Internet Activities in the Home

*N* = 1251, children reporting internet use at home

The use of the internet as an information resource seems to be well established amongst this sample, with 71% of home internet users reporting browsing the web for fun at least weekly, and 46% reporting looking up information for school at least weekly. The internet is not only used for downloading information, however, as 55% report using the internet to send emails and 28% report using chat rooms at least weekly. Network gaming does not yet seem to be making the impact some might have expected, with only 22% reporting weekly or more frequent use. Similarly, the web is not being regularly used as a site upon which to stamp their mark through the production of websites, by a large number in this sample, as only 12% report making websites on a weekly or more frequent basis. The 12% figure for weekly or more frequent shopping on the internet raises some questions about what the children in the sample understood by this question – it may reflect window shopping on the web, shopping with parents on the web, or ordering goods that parents then paid for. Given that web shopping relies on credit card ownership, this figure needs to be treated with some caution.

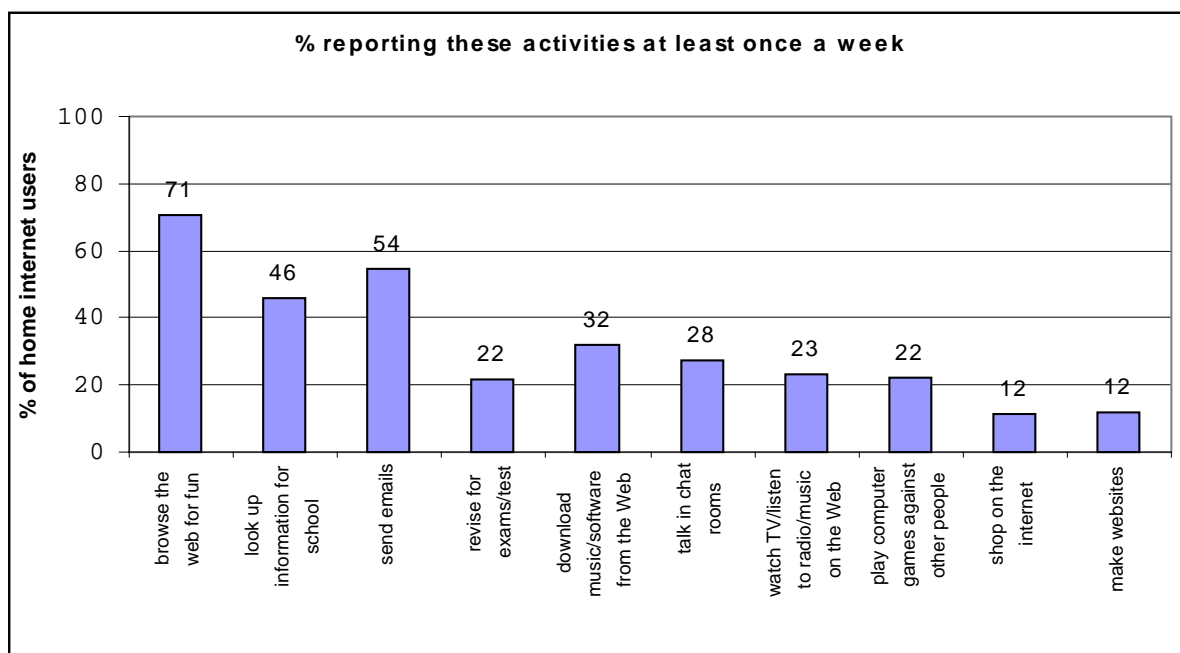


Fig 8. % of children reporting weekly or more frequent use (n= 1274, children reporting internet use at home, full percentages used).

If we look at the more detailed frequencies of internet use (Table 5) we can see that daily activities tend to be dominated by web browsing for fun or sending emails. Similarly if we look at the opposite end of the spectrum, not only is web design less likely to be reported as a regular (weekly or more) activity, but it is the activity that the highest percentage of internet users report never doing (71%). As with the figures for computer use, however, we can see that internet use is dominated by particular activities, but that the percentage of the sample reporting at least some use of the internet for a wide range of activities is again surprisingly high.

How often do you use the internet at home to do the following things?						
At home I use the internet to	Never	Less than once a month	At least one a month	About once a week	2-3 times a week	Every day
browse the web for fun	8	8	13	22	26	23
look up information for school	14	19	22	25	17	4
send emails	18	13	14	17	19	18
revise for exams/test	33	25	21	12	7	3
download music/software from the Web	43	14	11	12	12	8
talk in chat rooms	47	15	11	9	10	9
watch TV/listen to radio/music on the Web	52	16	9	9	8	6
play computer games against other people	58	12	8	8	8	6
shop on the internet	64	15	9	6	3	2
make websites	71	11	6	4	5	4
do something else	64	4	8	8	10	7

Table 4: Internet Activities at Home. n=1274, children reporting home internet use, valid %, rounded up

If we consider the use of the internet for specifically identified school activities, we see that 46% of the sample report using the internet to look up information for school at least once a week, and 22% of the sample reporting using the internet to revise for exams or tests at least once a week. In contrast, when we asked the home internet users whether they looked at their school website, only 16% responded that they did. This suggests that the materials being accessed via the web for specifically

designated school purposes are, in the main, unlikely to be materials produced by the children's own teachers, but by a range of other providers.

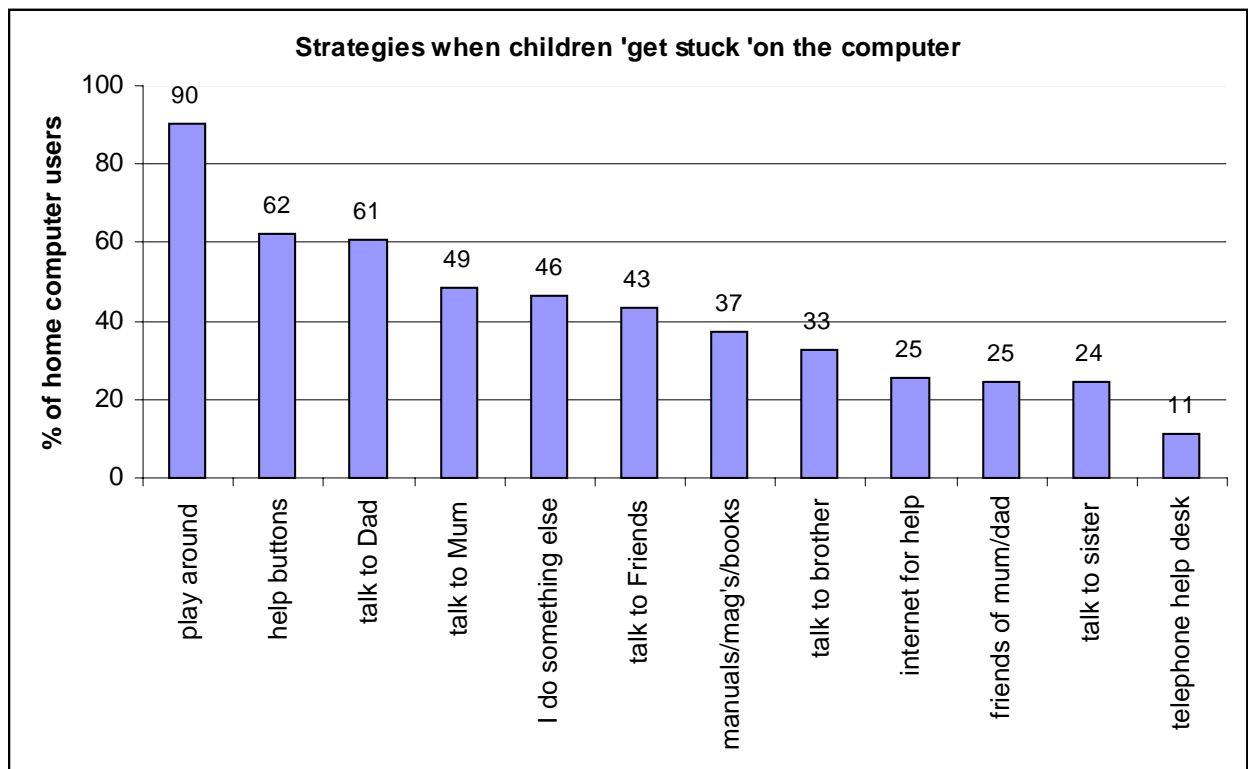
### 3.4 Resources Supporting Technology Use

Previous research suggests that technology use amongst young people may be shaped by a range of networks in the home and within peer group cultures. The questionnaire therefore focused on two specific issues: 1) what resources are used in the home to support young people's technology use and 2) who are the people that young people generally discuss technology with.

#### 3.4.1 In times of trouble

*N = 1578, children reporting computer use in the home*

This section reports on the strategies used by children to gain help when they run into difficulties using the computer at home. When 'getting stuck' on the computer at home, the young people in this sample reported a high degree of self-reliance supported by the computer interface, with 90% reporting playing around as a strategy they use when they get stuck. That 62% also report using help buttons, suggests that the online help in software environments plays a role in this 'playing around' strategy.



*Fig 9. % of home computer users reporting using these strategies 'occasionally or most of the time' (n = 1585, home computer users, valid %s)*

The role of other family members in supporting use is also important here, a role which, from our figures, seems to be gendered: 61% talk to Dad, 49% talk to Mum, 33% talk to brothers and 24% talk to sisters. Notably, however, a higher percentage of the sample report talking to parents rather than siblings.

Looking at these strategies, however, we begin to see a picture emerging of use of a range of resources that extends outside the boundaries of the immediate family and the home. 43% of the sample reported asking friends occasionally or most of the time, more than siblings. Similarly, parents friends (25%), manuals/magazines (37%) and the internet (25%) were also reported as strategies young people used to support them either occasionally or most of the time.

### 3.4.2 Informal Conversation

(n = 1818, full sample)

While the previous section refers to problems with computer use at home, this section discusses the frequency of conversations about technology in general with a range of individuals. What is clear from this section is that conversations about technologies are predominantly carried out with friends. If we look at the reported frequencies of conversations we see that friends are talked to about technologies on at least a weekly basis by 65% of the full sample and are the people who are most likely to be reported as daily conversations (19%). In contrast, parents are talked with by 47 % (fathers) and 45% (mothers) on at least a weekly basis, and siblings again are the ‘third’ option with brothers at 30% and sisters at 24%.

#### Who do you talk to about technologies like mobile phones/internet/computers?

I talk about technologies to	Never	less than once a month	at least once a month	about once a week	2-3 times a week	every day
Mum/Step Mum	25	16	14	21	16	8
Dad/Step Dad	24	15	15	20	18	9
Brothers	50	9	10	11	12	7
Sisters	56	10	10	10	9	5
Wider Family	47	22	14	12	4	2
My Friends	12	11	13	21	25	19
Parents Friends	61	17	10	7	3	3

Table 5: Informal Conversations about technologies (n=1818, full sample, valid %s rounded up)

### 3.5 Children’s interests outside school

(n = 1818, full sample)

While young people are reported as active computer users, they also have a range of other interests and activities in their daily lives. The question ‘what do you like doing outside school’ was a broad brush approach to mapping out briefly the extent to which digital activities compete with other activities in the affections of young people. What is noticeable is the extent to which informal time spent with friends and traditional media such as television and film are the most popular activities outside school, with digital technologies ‘tying’ with sports activities in third place. The dominance of the digital age, it seems, remains somewhat contested.

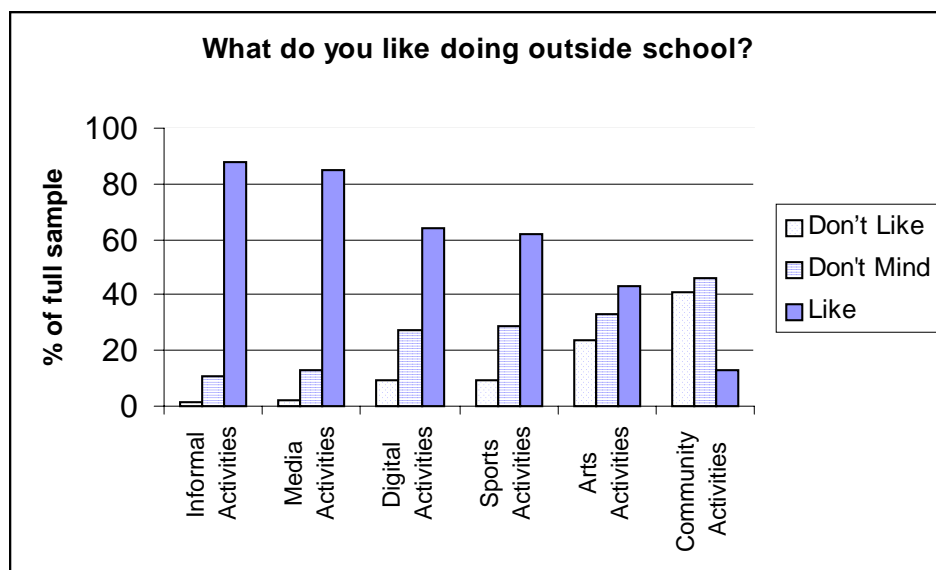


Fig 10. Attitudes to activities as % of full sample, (n = 1818, full sample, valid %s)

### 3.6 Mobile Technology Use

(n = 1532, mobile phone users)

Amongst this sample mobile phone use was very high, with 84% of children reporting using a mobile phone. When we look at the ways in which these phones were being used, it was clear that this technology was being used on a more intensive and regular basis than either home computers or the internet. For example, only 5% of phone users reported never speaking to friends, only 3% report never speaking to family, and only 9% report never 'texting' friends.

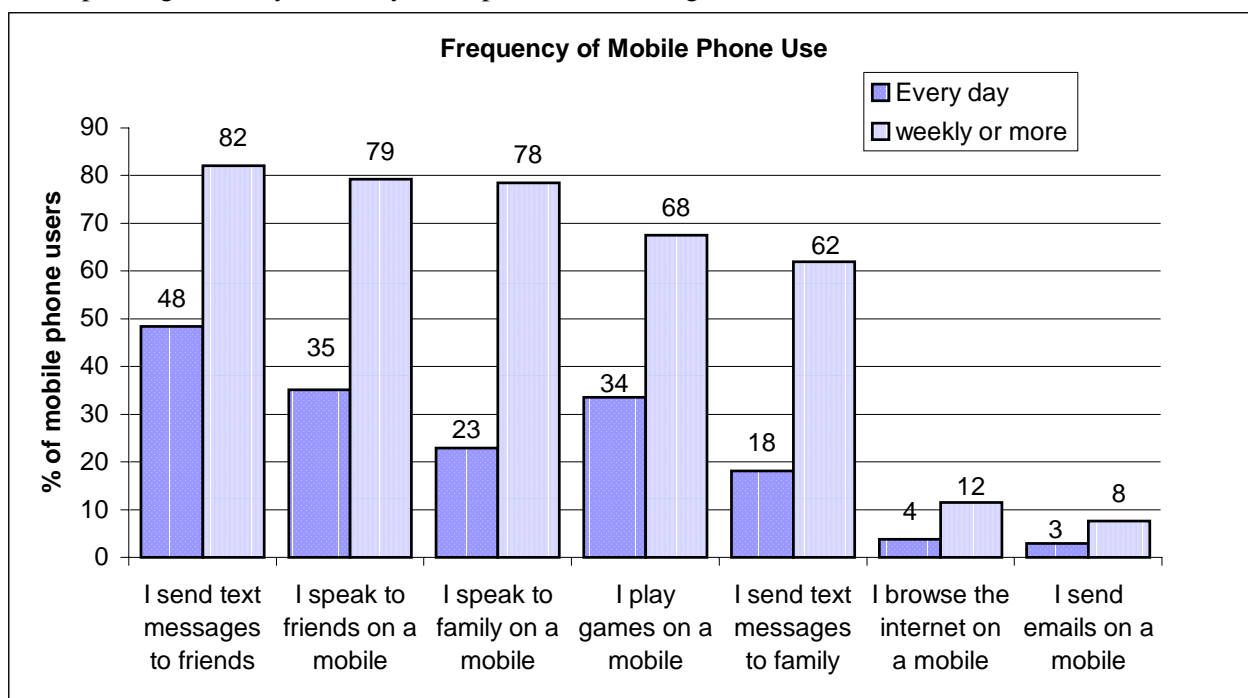


Fig 11. Frequency of different types of mobile phone use (n = 1547, mobile phone users, valid %s)

Similarly, levels of daily use were high, with nearly 50% of the sample reporting texting friends daily, and over at third reporting talking to friends and playing games every day on their mobile. The low levels of use of internet enabled functions on the mobile phone may reflect the present low levels of internet phone ownership (15%, see fig.2).

The cost of these calls and texts was managed within this sample, primarily through pre-pay cards ('pay as you go' systems) with 50% of young people reporting that they paid for these and 34% reporting that their parents paid.

### 3.7 Internet and Computer use in school

(*n=1818, full sample*)

Reported computer and internet use in school amongst this sample was dominated by two activities: writing and looking up information on the internet, with writing reported as an activity of weekly or more frequency by 58% of the sample, and looking up information on the internet by 55% of the sample. Apart from the generic ‘fiddle around looking at different things’ (48%) and browsing the web for fun (46%) no other activities come close in reported frequency in school. Even within these two major categories, however, there is a wide frequency distribution, with 5% of the sample reporting computer use for writing every day and 5% reporting never using the computer for writing in school; 9% reporting internet information use every day and 12% reporting never using the computer for this in school. Interestingly, it seems that the internet as an information resource has now far overtaken the previously ubiquitous CD-Rom for information retrieval in school for this sample.

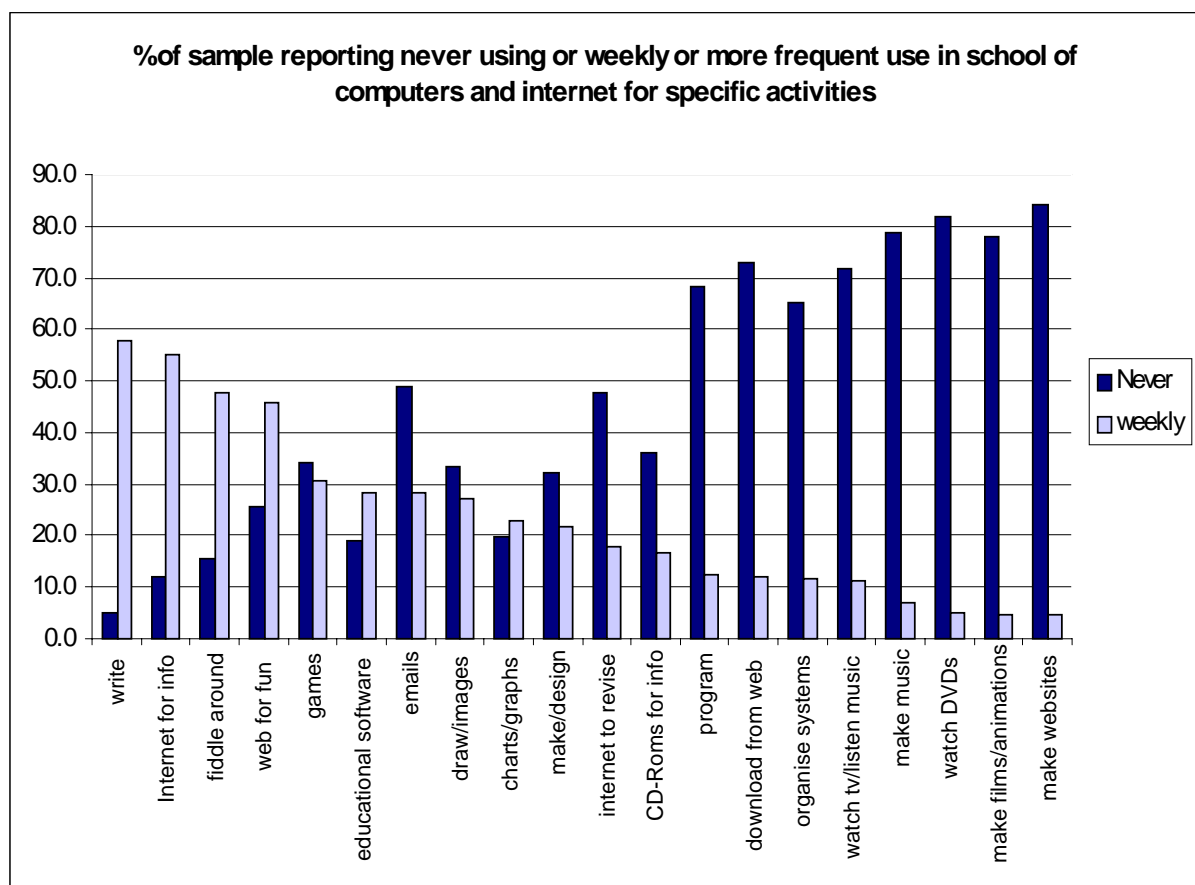


Fig 11. Frequency of different computer use in school (*n = 1818, full sample, valid %s used*)

If we look at the other end of the spectrum, at the activities which the highest percentage of children report never doing in school, we see programming (68%), making films and animations (82%) watching DVDs (82%) are relatively unusual activities. Similarly, we see a range of web based activities never experienced by the sample – downloading from the Web (73%), watching audio-visual output on the web (72%). The activity reported as least likely to have been experienced by the sample was web design, with 82% reporting never having done this. The low use of many of these activities in schools might be explained as a result of the technical demands they may place on schools and teachers and the extent to which these are, generally, unusual activities outside school. In contrast, however, ‘making music’ using technology was also surprisingly low, with 79% of the sample reporting never using computers in school for music, and only 7% reporting using computers for music on a weekly or more frequent basis. Given the heavy technologisation of the music industry

in recent years and the increasing availability of music composition and editing software, the degree to which computers seem not to be used in school classrooms for music is slightly surprising.

The following table provides the full figures for the sample's reported computer use in school:

**How often do you use a computer at school for doing these things?**

	Never	less than once a month	at least once a month	about once a week	2-3 times a week	every day	Weekly or more
I write	5.0	14.7	22.4	29.2	23.8	4.7	57.7
I use the internet to look up information	12.0	14.8	18.4	23.3	22.6	9.0	55.0
I fiddle around looking at different things	15.7	18.2	18.7	26.6	15.3	5.8	47.6
I browse the web for fun	25.5	15.9	13.0	17.9	17.9	9.9	45.7
I play games	34.3	20.4	14.5	16.5	9.9	4.4	30.8
I use educational software	19.0	26.6	26.0	18.7	7.9	1.8	28.4
I send emails	49.0	12.1	10.4	9.3	9.9	9.3	28.4
I Draw/play with images/photos	33.2	23.0	16.8	17.3	7.9	1.9	27.1
I make or use charts/graphs/tables	19.7	33.9	23.6	14.9	7.2	0.8	22.9
I Make/Design	32.2	26.6	19.5	13.8	7.0	1.0	21.7
I use the internet to revise	47.6	21.0	13.4	10.3	5.9	1.7	17.9
I use CD Roms to look up information	36.1	29.2	18.2	10.8	4.7	1.0	16.5
I program	68.3	13.7	5.7	7.4	3.7	1.2	12.3
I download music/software from the Web	72.8	9.4	5.9	4.8	4.3	2.8	12.0
I organise the computer files/memory	65.2	14.2	8.9	6.3	4.2	1.2	11.7
I watch TV/listen to radio/music on the web	71.8	11.1	5.7	4.8	3.3	3.2	11.4
I make/record music	78.7	9.6	4.4	3.2	2.6	1.3	7.2
I watch DVDs/videos	81.7	8.6	4.5	1.7	2.4	0.9	5.1
I make films/animations	77.8	12.4	5.2	2.9	1.4	0.3	4.6
I make websites	84.1	8.7	2.8	1.7	1.4	1.4	4.5

*Table 6: Children's reported use of computers in school (n = 1818, full sample, valid %s rounded up)*

#### 4. Analysis by gender

(boys n= 905, girls n= 905)

##### 4.1. Gender: Computer Use Outside School

In respect of computer use outside school, several patterns emerged from the data. While the most important site of computer use for both girls and boys was clearly the home, a higher percentage of boys than girls reported frequent use of a computer here and in all other sites. Any differences between boys and girls emerged most clearly when we consider the frequency of use in different locations, with higher percentages of boys reporting, for example, daily use of the computer at home (boys 42%, girls 25%). The use of a computer in friends houses seemed also to be strongly patterned by gender, with more boys than girls reporting any use at friends houses (77% boys, 70% girls) and boys reporting more frequent use at friends houses (boys at least once a week at friends, 32%, girls 19%)

How often do you use a computer (NOT a games console) outside school		Never	less than once a month	at least once a month	about once a week	2-3 times a week	every day	weekly or more
I use a computer at home	Boys	11	3	4	13	27	42	82
	Girls	13	5	7	16	34	25	74
at a relative's house	Boys	41	25	15	12	5	2	20
	Girls	47	23	13	11	4	1	17
at a friend's house	Boys	23	21	23	21	9	2	32
	Girls	30	31	20	13	5	1	19
At my parents' workplace	Boys	76	10	6	3	3	2	8
	Girls	78	12	5	2	3	1	5
In a library/museum/science centre	Boys	59	22	10	5	3	1	10
	Girls	56	25	10	6	2	1	9
At a youth club/youth group	Boys	83	5	4	5	3	1	9
	Girls	84	6	2	6	2	1	8
In an internet cafe	Boys	83	9	3	2	1	1	4
	Girls	89	7	3	1	1	0	2

Table 7: Frequency of computer use in different locations x gender (boys n=905, girls n=905, valid %s used)

##### 4.2. Gender: technology ownership and access

Within the sample there were also several differences between boys and girls in terms of technology ownership. In terms of technology presence in the household, male respondents were more likely to report home ownership of any given technology than female respondents. Similarly male respondents reported home ownership of higher numbers of all technologies.

How many of these technologies do you have at home?		None	One	Two	Three	Four plus
Computers	Boys	11	51	24	8	7
	Girls	13	55	21	7	4
Internet	Boys	24	57	13	4	2
	Girls	31	55	10	2	2
Printers	Boys	13	63	19	4	2
	Girls	17	66	14	2	1
Scanners	Boys	41	53	5	1	1
	Girls	50	46	3	0	1
Digital Television	Boys	52	38	7	2	2
	Girls	60	33	5	1	2
Consoles	Boys	10	38	28	13	12
	Girls	22	45	21	8	6
CD-Writers	Boys	66	28	3	1	2
	Girls	76	22	2	0	1

Table 8: reported home technology ownership x gender (male n = 905; female n = 905, valid %s used)

These figures, however, require some degree of interpretation – after all, we would expect the gender make-up of households to be evenly balanced with similar numbers of boys and girls in them. That boys within the sample were more likely to report higher levels of ownership then raises questions about the ways in which this particular question was interpreted that in themselves are potentially significant. For example, could we explain this result by saying that girls responded to the wording of the question ‘how many of these technologies do you have at home?’ differently, perhaps not reporting technologies in the home that they did not see as their own? Or is it that the boys in the sample were more *aware* and therefore reported higher numbers of the different technologies in the home. Either way, these results remain somewhat puzzling and require further research to unpick.

When we asked the sample ‘do you own any of these technologies yourself?’ we saw a slightly different pattern emerging with respect to personal technologies. Differences between boys and girls ownership of particular technologies were marked, with more boys (50%) reporting personal ownership of computers than girls (37%) and more boys reporting personal ownership of consoles (85%) than girls (50%). This pattern was reversed to a limited extent, however, when it came to mobile phones and electronic diaries, with girls reporting higher ownership of electronic organisers (43%) than boys (36%) and of mobile phones (79%) than boys (69%).

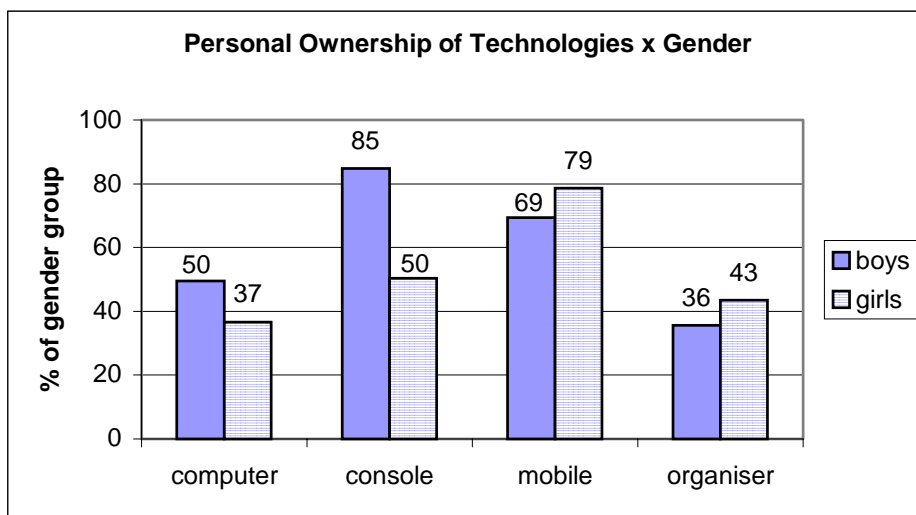


Fig 12. Personal technology ownership x gender (n=1810, boys n=905, girls n=905, valid %s)

When we look at access to computers in the home another trend emerges, with male respondents more likely to report computers being located in their own bedroom (28%) than females (18%).

### 4.3 Gender: Computer Use at home

When we examine boys and girls use of the computer for 'fun' and 'schoolwork', the clearest gender difference emerges around the frequency of daily use of the computer for 'fun' activities, with boys (45%) reporting much higher use of the computer for this purpose than girls (24%). In contrast, there are general similarities in terms of reported frequencies of computer use for school.

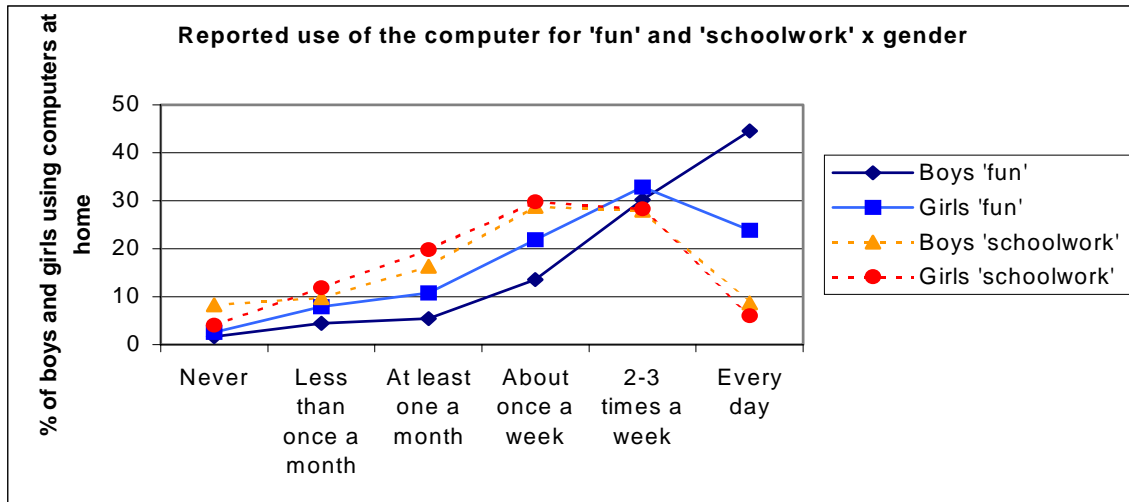


Fig 13. Use of the computer for 'fun' and 'schoolwork' x gender (home computer users: boys n=804, girls n=773)

Looking at the more detailed breakdown of computer activities by gender, we can begin to identify certain differences – for example, more boys than girls report using the computer on a daily basis for all activities, the difference being most marked, however, in the area of games play with a 20% difference between boys (33%) and girls (13%) which maps on to the differences between boys and girls in reported use of the computer for daily fun activities in fig. 13., suggesting that the key difference in home computer use is marked by a core group of male users using the computer for games on a daily basis. There are other identifiable gender differences, however: boys report higher use of the computer for all activities on both daily and weekly or more frequencies.

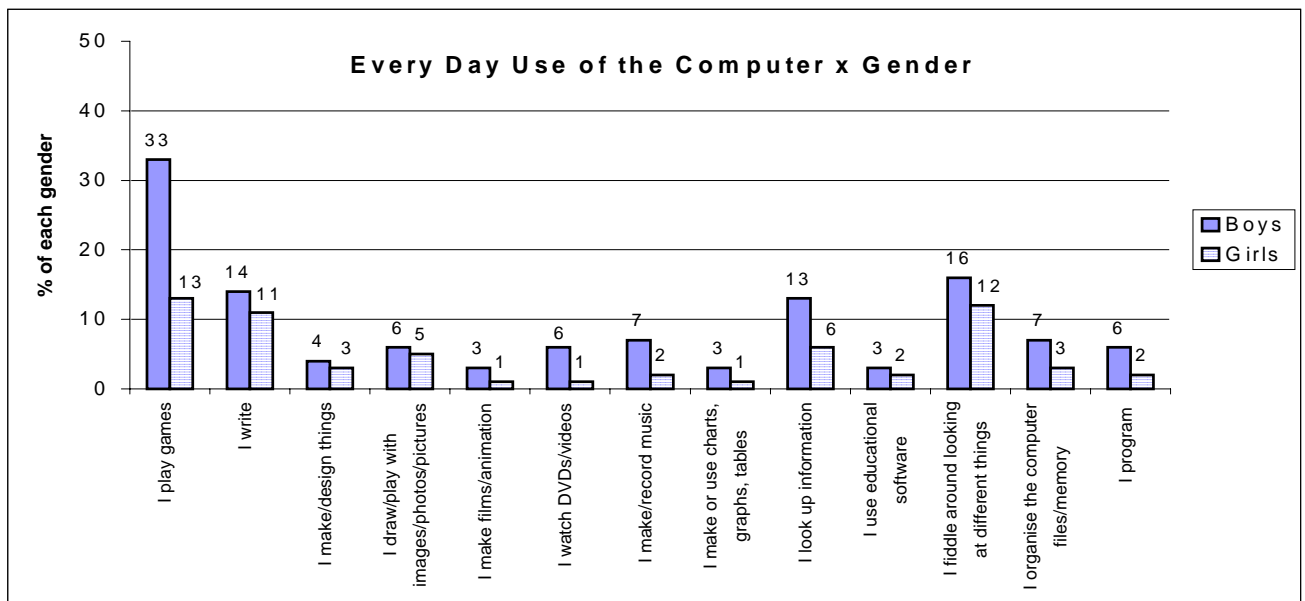


Fig 14: Daily use of the computer x gender (home computer users: boys n=804, girls n = 773)

If we look at the percentages of boys and girls reporting never doing these activities, however, the picture becomes more complex. Rather than less boys reporting never using the computer for all activities, as we might expect from their higher frequencies of use on a daily and weekly basis, we see instead that the percentages of boys and girls reporting never using a computer for different activities are patterned according to activity rather than along a simple gender line. Less girls report never using the computer, for example, to make/design things, to use charts, graphs, tables, to use educational software, to fiddle around, to look up information and to write. Although in some cases these differences are only negligible it does prevent a broad brush analysis which argues that more boys necessarily use home computers than girls.

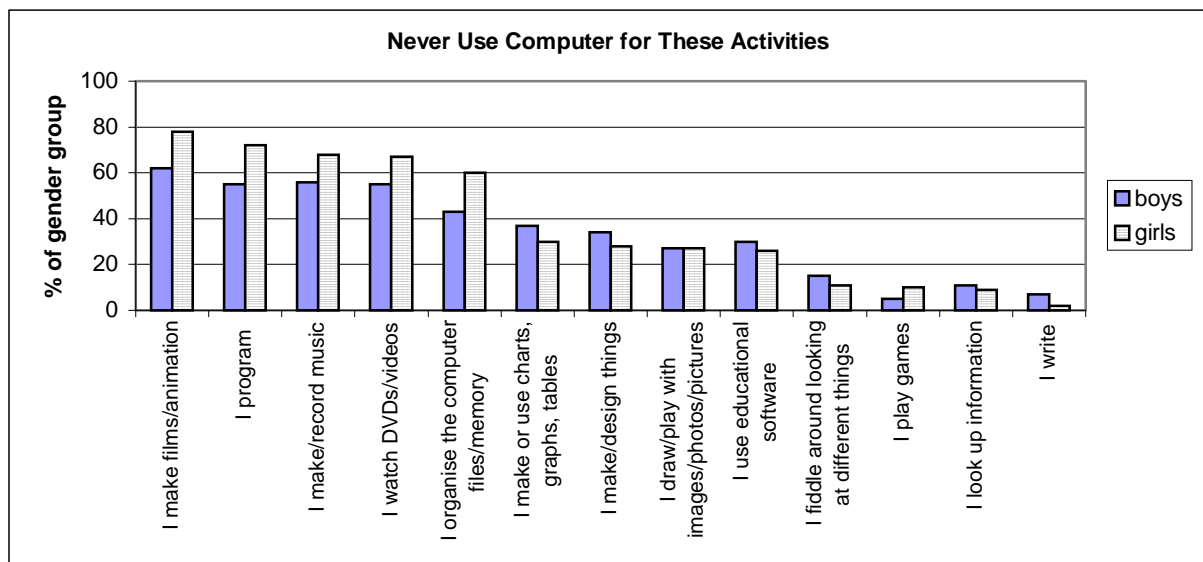


Fig 15: Ever use the computer x gender (home computer users: boys n=804, girls n = 773)

#### 4.4. Gender: Internet Use and Access

Internet use in different locations was patterned for boys and girls in a broadly similar way to computer use, with the home remaining the key site of access, and with more boys (26%) than girls (15%) reporting daily internet use.

#### How often do you use the internet outside school ?

I go on the internet		Never	less than once a month	at least once a month	about once a week	2-3 times a week	every day	Weekly
								or more
At home	Boys	26	5	6	13	23	26	63
	Girls	32	7	8	15	23	15	53
At a relative's house	Boys	58	18	11	8	3	2	13
	Girls	61	19	10	7	3	1	10
At a friend's house	Boys	42	21	16	13	6	2	21
	Girls	46	26	16	9	3	0	13
At my parents' workplace	Boys	82	7	3	4	3	1	8
	Girls	84	7	4	3	2	0	5
In a library/museum/science centre	Boys	73	14	6	4	1	1	7
	Girls	70	16	7	4	2	1	7
At a youth club/youth group	Boys	87	3	3	4	2	1	7
	Girls	89	3	1	5	1	1	6
In an internet cafe	Boys	84	8	3	2	1	1	5
	Girls	91	5	2	1	0	0	2

Table 9: Frequency of internet use in different locations x gender (boys n=905, girls n=905, valid %s used)

#### 4.5 Gender: Home Internet Use

When we look at levels of reported use of the internet at home we can see that there are activities which are clearly gendered, for example, when we consider what the respondents report *never* to do on the internet at home, there are marked differences between girls and boys, with more boys than girls reporting ever using the internet for watching TV/listening to music; downloading software, shopping, making websites and networked computer games. In contrast, relatively more girls than boys report ever using the web for looking up information for school and sending emails. A similar percentage of boys and girls report ever using the web for revising, chat rooms and browsing the web for fun.

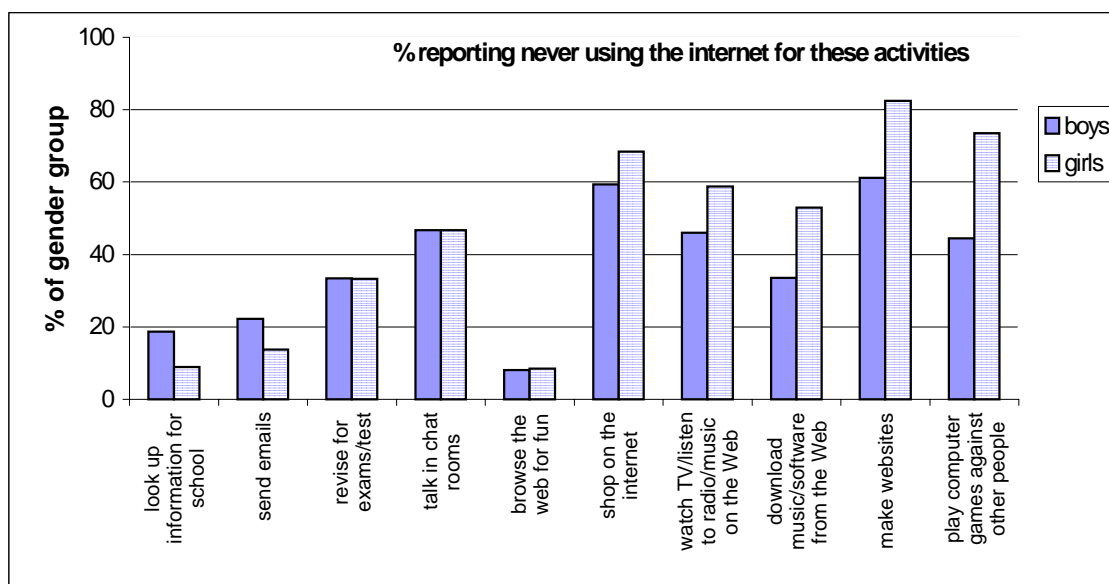


Fig 16: Never use the internet x gender (home internet users: boys n=666, girls n = 601)

When we come to consider the most frequent users of the web, those reporting using it on a daily basis, however, there is little distinction between girls and boys in terms of emailing, looking up information for school, shopping, chat rooms, revising for exams but substantially more boys report browsing the web for fun on a daily basis (boys: 29%, girls: 16%).

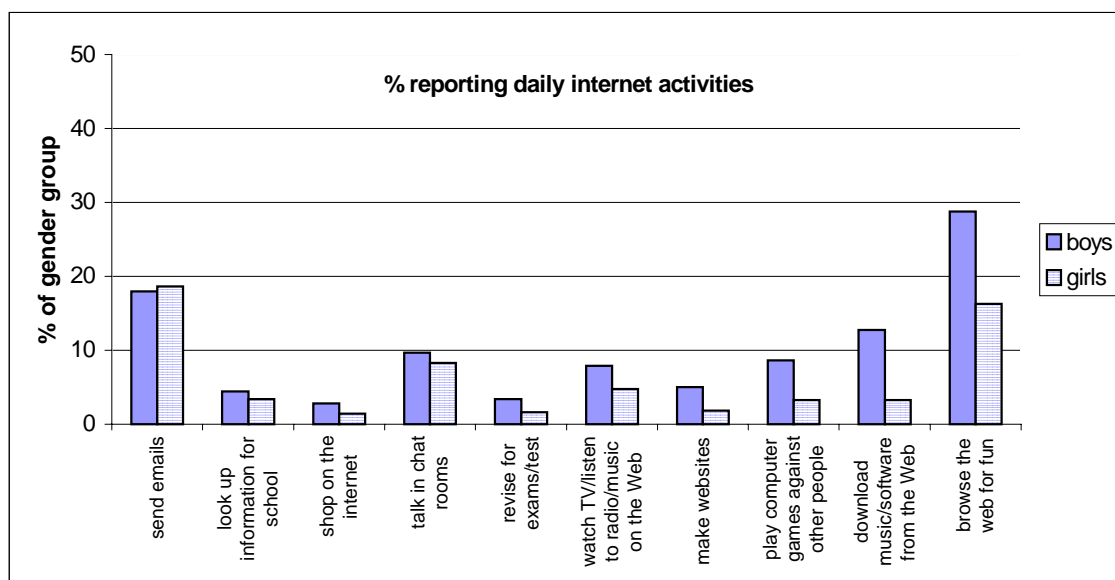


Fig 17: Daily use of the internet x gender (home internet users: boys n=666, girls n = 601)

#### 4.6 Gender: Mobile Phone Use

A very different picture emerges in respect of gender when we look at mobile phone use. To begin with a higher percentage of girls (90%) than boys (79%) report using a mobile phone. And, while we see very similar patterns of mobile use for talking to family and friends, we see much higher levels of intense (daily) use of the phone to text friends amongst female respondents as well as higher daily use for texting family.

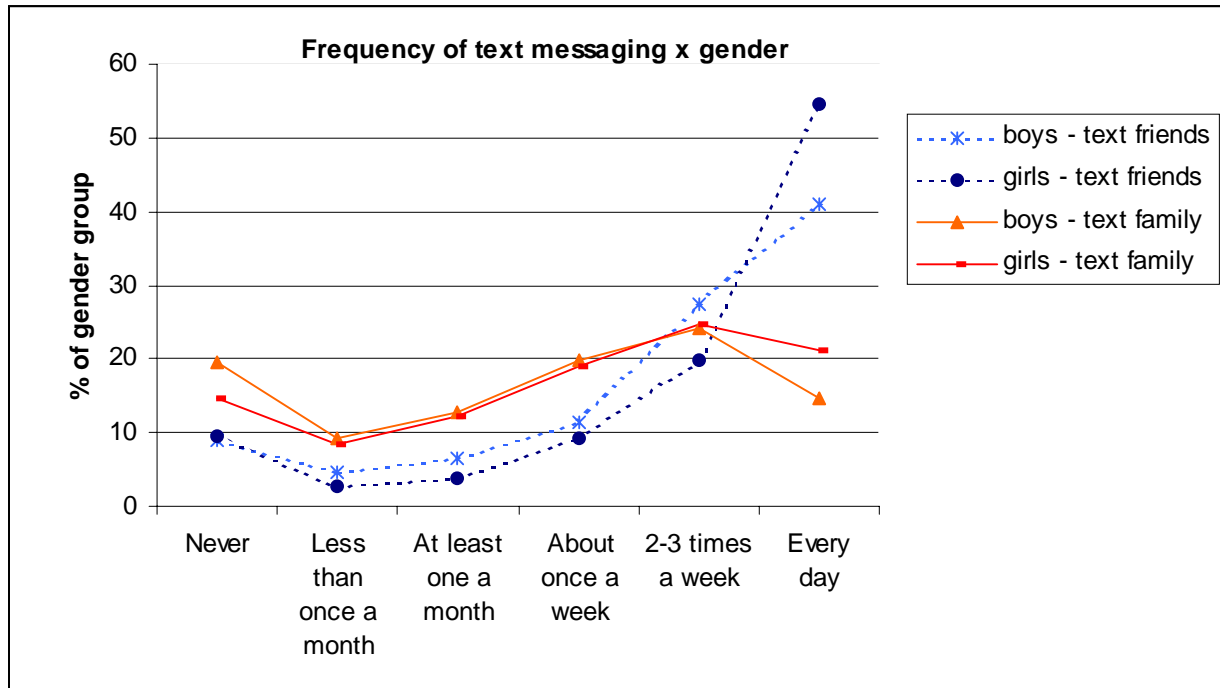


Fig 18: Frequency of text messaging x gender (mobile phone users: boys n= 723, girls n=817)

Finally, whereas games play on the computer or internet was patterned by more boys reporting frequent use, in contrast, games play on mobile phones seems to indicate no gender differences with 34% of boys and 33% of girls both reporting mobile games play on a daily basis.

#### 4.7 Gender: Resources supporting technology use

This section reports both the informal ‘conversations’ around technology and the ‘just in time’ help required to support computer use in the home.

In respect of who boys and girls in the full sample report talking to about technologies a similar percentage of boys and girls reported ever speaking to most groups about technologies, with the exception of female family members – where girls were more likely to ever talk to their Mum (78%) than boys (72%) and to their sisters (girls: 49% boys: 40%). When looking at who the sample talked to frequently (2-3 times a week or more), boys and girls, again, were roughly similar except in terms of conversations with friends, where a higher percentage of boys reported frequent conversations with friends (48%) than girls (40%).

Looking at how boys and girls reported using resources in the home to help them when they got stuck we saw broad similarities between boys and girls in respect of preferred options – i.e. playing around, asking family members and friends. However, there were differences between boys and girls in this respect, as a higher percentage of girls than boys reported using family members as a resources, while a higher percentage of boys than girls reported using artefacts such as manuals and magazines, talking to friends, going on the internet or calling a help desk.

If I get stuck on the computer I		Ever Use
play around to see if I can sort it out	boys	88
	girls	93
ask/phone/talk to Mum	boys	44
	girls	54
ask/phone/talk to Dad	boys	57
	girls	65
ask/phone/talk to brother	boys	29
	girls	36
ask/phone/talk to sister	boys	18
	girls	31
ask/phone/talk to Friends of mine	boys	46
	girls	40
I ask friends of mum/dad	boys	25
	girls	24
I read manuals/magazines/books	boys	44
	girls	30
I click on help buttons	boys	56
	girls	69
I call a telephone help desk	boys	15
	girls	8
I go on the internet for help	boys	28
	girls	23

Table 10: resources used to support computer use at home x gender (children reporting home computer use, boys n=804, girls n=773)

#### 4.7: School use of computers and internet x gender

(full sample, boys n=905, girls n=905)

When we look at the sample's reported computer and internet use in school, a pattern emerges which reflects the gender patterns in computer and internet use in the home.

If we start by considering what the children report ever using in school. As a general rule a higher percentage of boys than girls report *ever* using the computer for most activities. Of the 21 categories of activity, in only 4 cases was there no difference in the percentages of girls and boys reporting ever having used the computer for these activities in school, these were: writing, educational software, fiddling, using charts/graphs. In no cases did a higher percentage of girls report ever using the computer for any activities.

The differences between boys and girls in terms of ever using the computer for certain activities in school were most marked in the categories of making websites (18% less girls than boys report ever having done this in school), and downloading from the web (17% less girls than boys report ever having done this in school)

If we look, in contrast, at regular uses of the computer at school (reported frequency of once a week or more) we see more differences emerge between boys and girls in terms of computer use at school. Notably, a higher percentage of boys reported weekly or more usage of all activities than girls. In 9 of the 21 categories over 10% more boys than girls reported using a computer at least once a week or more: Playing games, making/designing, playing with images/photos, using CD-Roms to look up information, using educational software, fiddling around, using the internet for information, using the web for fun and downloading from the web.

The least differences between boys and girls were in the activities of internet shopping, internet for revision, programming, writing and making animations, all with less than 4% more boys reporting higher usage. These activities are notable for either their general high levels of usage in schools (writing) or their relative rarity in school activities.

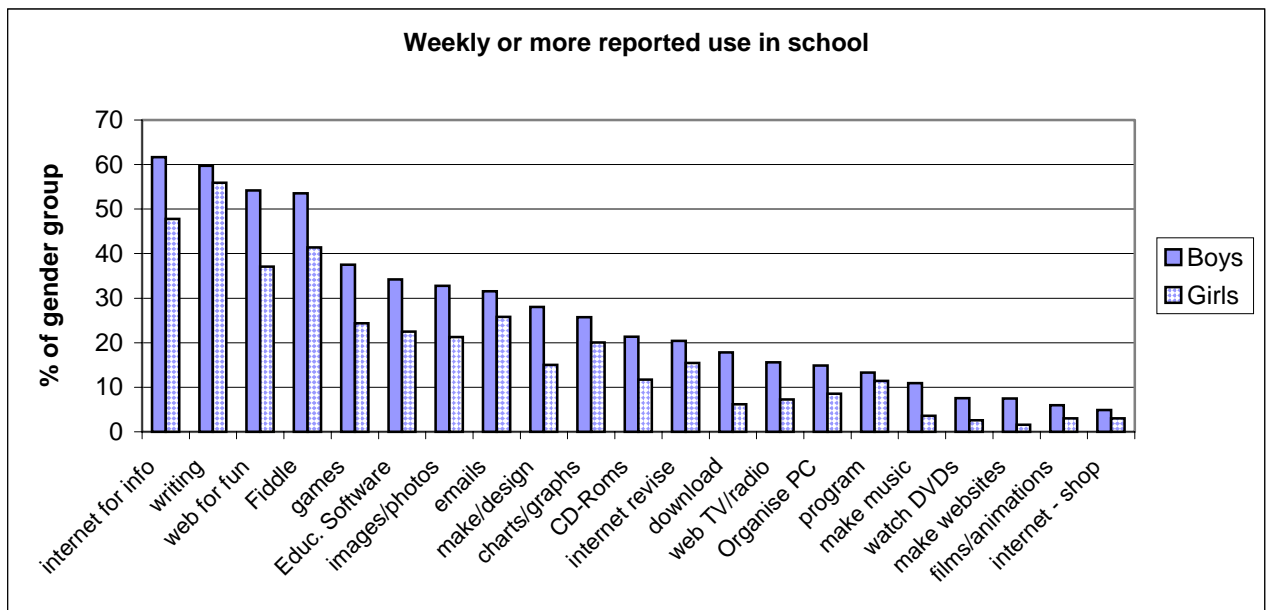


Fig 19. Weekly Reported Computer and Internet Use in school x gender (Full Sample, boys n=905, girls n=905)

## 5 Differences by socio-economic area

(Full Sample: High n=436; Middle-High n=319, Middle-Low n=525, Low n=158, total n=1438)

This aspect of the analysis will discuss the extent of the patterning of computer and internet access and use outside school with respect to the socio-economic area of the respondents. The four different areas will be described as 'high/middle-high/middle-low/low' in respect of penetration of high incomes and degree level education relative to the GB population (see introduction, section 2.4)

### 5.1 Socio-economic area: technology ownership

Home ownership of technologies in this sample was strongly correlated with socio-economic area, with respondents from higher education and income areas generally more likely to report ownership of computers, printers and internet access. In the case of digital television and games console ownership, this pattern is reversed.

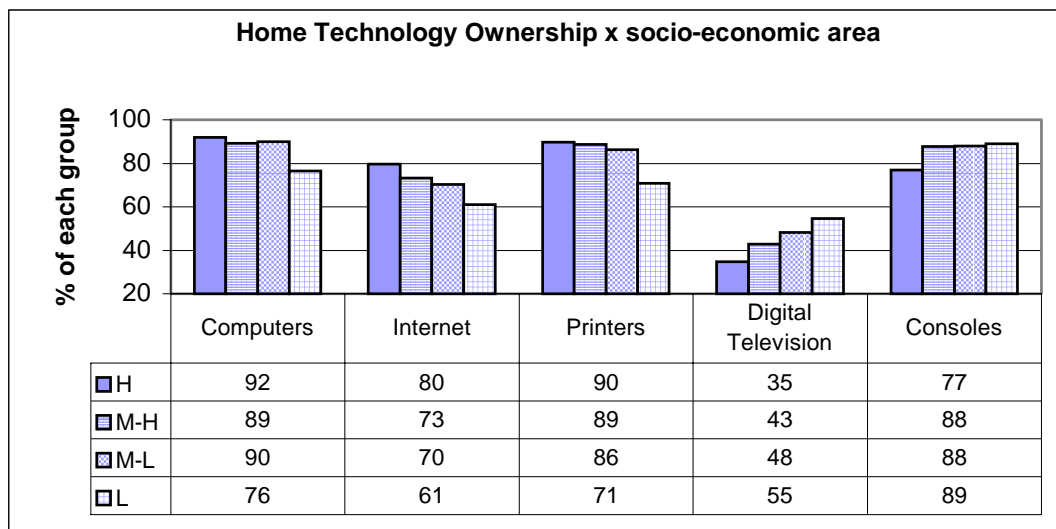


Fig 20: home technology ownership x socio-economic area (full sample n=1438)

When we consider the levels of personal ownership of technologies, the picture becomes less straightforward, with different socio-economic areas patterning access to personal technologies in more complex ways. In general, however, a lower percentage of respondents from the highest socio-economic areas reported personal ownership of specific technologies than respondents from other areas, with the exceptions of calculator and electronic organiser ownership.

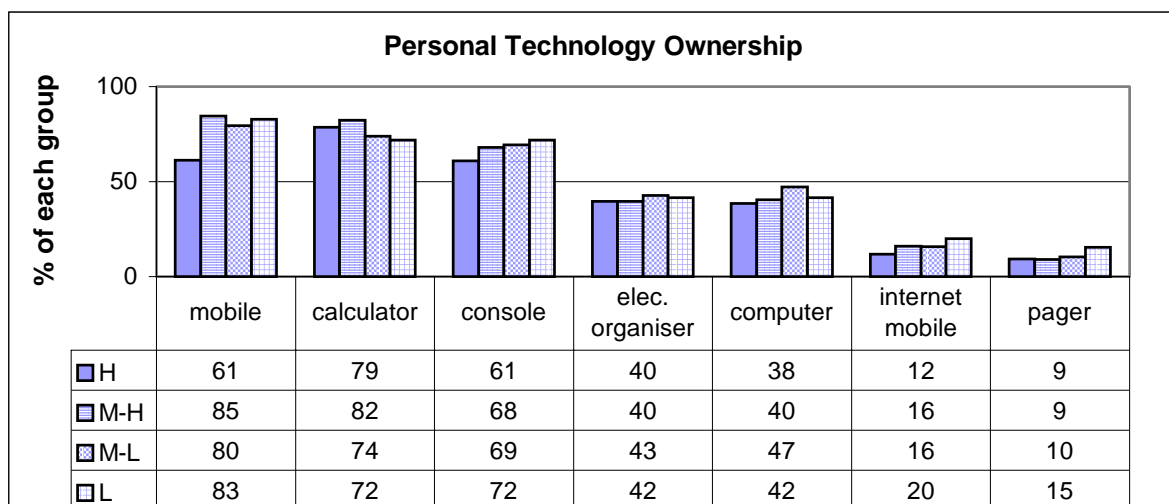


Fig 21: Personal Technology Ownership x socio-economic area (full sample, n=1438)

## 5.2 Socio-economic area: access to technologies in the home

If we look at where the computer is located in the home amongst the different groups, we see a range of interesting results. In respect of the location of computers in the respondents' own bedrooms, for example, the lower the socio-economic area, the higher percentage of respondents reporting a computer in their own bedrooms. In contrast, if we consider the dedicated space of 'computer room/kidsroom/study', children from higher education/income areas are more likely to report a computer being located there than those children from lower socio-economic areas, perhaps reflecting the size of house needed to set aside dedicated computer or work space.

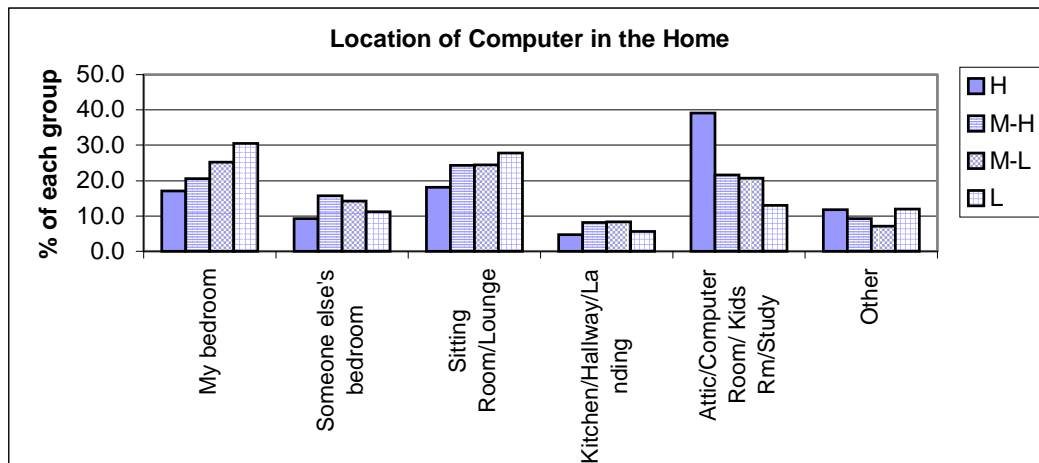


Fig. 22 Location of computer in the home (Home Computer Users: High n=401 Middle-High n=283, Middle-Low n=463, Low n=120)

## 5.3 Socio-economic area: Location of technology use outside school

When we look at where respondents from different socio-economic areas are using computers, it is clear that for all socio-economic areas the home remains the key site of use, with a higher percentage of children from the higher socio-economic areas reporting use in the home. Notably, however, we see a much higher percentage of children from the lowest socio-economic area making use of public or community and wider family provision. This may go some way to support the argument that the public provision of access may be important for this group, particularly if we relate these results to the patterning of computer ownership by socio-economic area (fig.19)

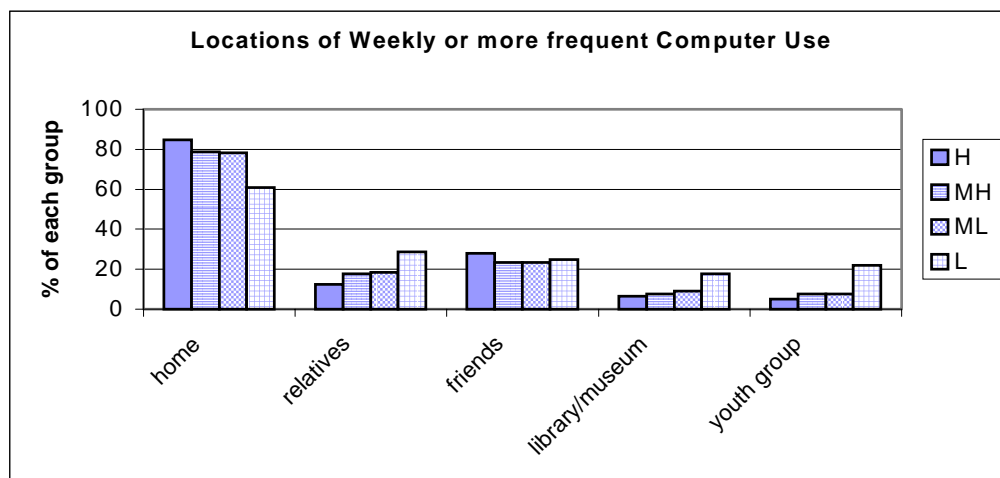


Fig 23. Locations of weekly or more frequent computer use (full sample, n=1438)

## 5.4 Computer Use in the home

When we look at computer use in the home we need, therefore, to bear in mind that young people from lower-socio-economic areas are less likely to have access to and consequently use a computer in the home, we are therefore looking at percentages only of those young people who *do* use a computer in the home from each socio-economic area and not for the whole sample of children from each of these groups.

Looking at the broad categories of computer use in the home a tendency seems to emerge of children from the lowest socio-economic area reporting more frequent use of the computer for 'fun' and children in the middle socio-economic areas using the computer more frequently for schoolwork.. The area with the highest percentage of children reporting weekly or more computer use for school, for example, is the second lowest (third quartile) socio-economic area.

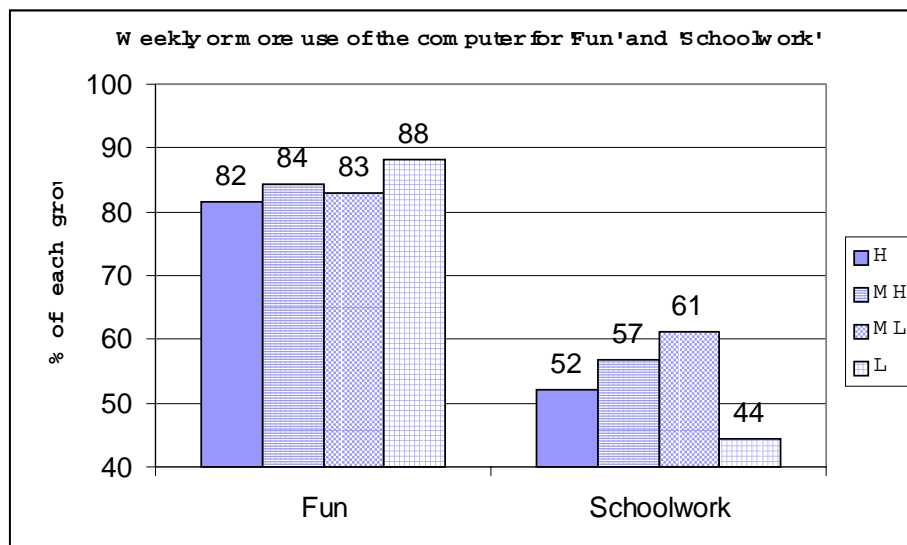


Fig 24: Use of the computer at home for 'fun' and 'schoolwork' x socio economic area (Home Computer Users: High n=401 Middle-High n=283, Middle-Low n=463, Low n=120)

When looking at specific activities on the home computer we see a trend emerging in which children from the lowest socio-economic area consistently report higher frequencies of use of the computer for almost all activities at home. This is marked in specific instances, for example, in respect of music, making/designing with the computer and programming the computer:

	Make/record music once a week or more	Program once a week or more	Make/design things once a week or more
High	18%	12%	25%
Middle – high	15%	16%	23%
Middle – low	19%	17%	30%
Low	29%	32%	41%

Table 11: music, programming, making on a computer at home x socio economic area (Home Computer Users: High n=401 Middle-High n=283, Middle-Low n=463, Low n=120)

For two activities, writing and looking up information, the pattern changes, and respondents from the third quartile areas (middle-low) report the highest levels of use – these are also the respondents who report the highest weekly or more levels of regular computer use for school purposes (fig. 23).

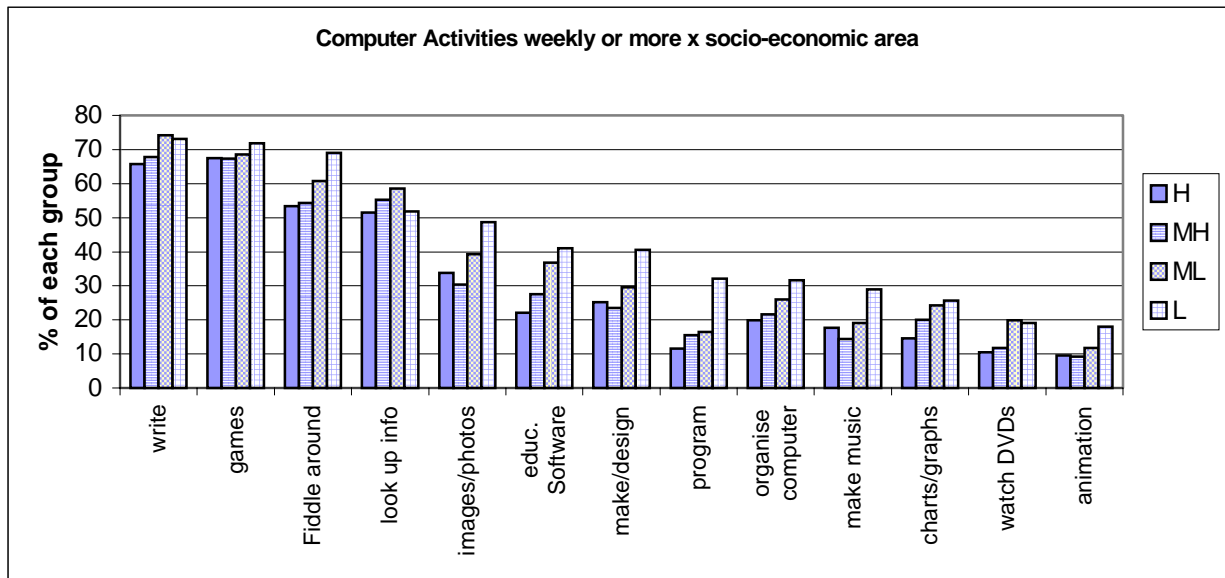


Fig 25: Use of the computer at home for 'fun' and 'schoolwork' x socio economic area (Home Computer Users: High n=401 Middle-High n=283, Middle-Low n=463, Low n=120)

We could begin to say, then, that the respondents from the lower-socio economic areas are likely to be more frequent users of the computer at home, with children from the lowest group most likely to use the computer most frequently in all cases with the exceptions of writing and looking up information. Children from the highest socio-economic areas always report lower levels of use of the computer for all activities, than children from the mid-low and low areas, with the exception of making music.

### 5.5: Socio-economic area: location of internet use outside school

As with computer use, internet use, whatever the respondents' socio-economic area, is heavily dominated by use in the home, although, again we see the percentages of children reporting home use decreases in accordance with socio-economic area of the respondent. Similarly, we see young people from the lowest socio-economic area using the internet more in libraries/museums, youth groups than respondents from other socio-economic areas.

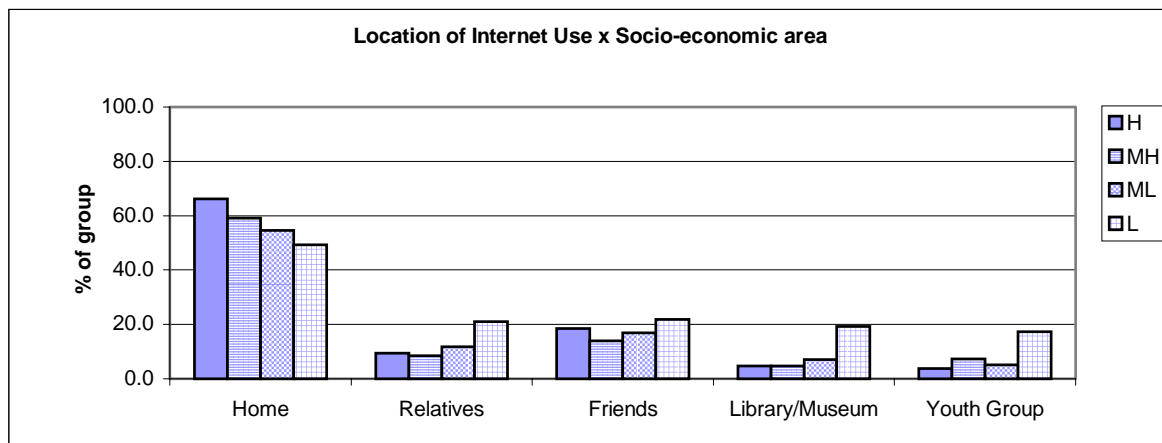


Fig 26. Locations of weekly or more frequent internet use (full sample, n=1438)

### 5.6: Socio-economic area: internet activities in the home

As with computer use, the levels of internet activities reported below must come with a ‘health warning’. Namely, that the figures reported here reflect only those young people within each socio-economic area who use the internet at home. As we saw in section 5.1, access to the internet is clearly patterned along socio-economic lines and therefore a higher percentage of children from lower socio-economic groups will not even use the internet at home.

Notably, there were also differences between respondents from different socio-economic areas in respect of the devices being used to get onto the internet. Although the computer remains the main internet access point in the home, we can see the percentage of internet users in each group using other devices increases as we move from higher to lower socio-economic areas:

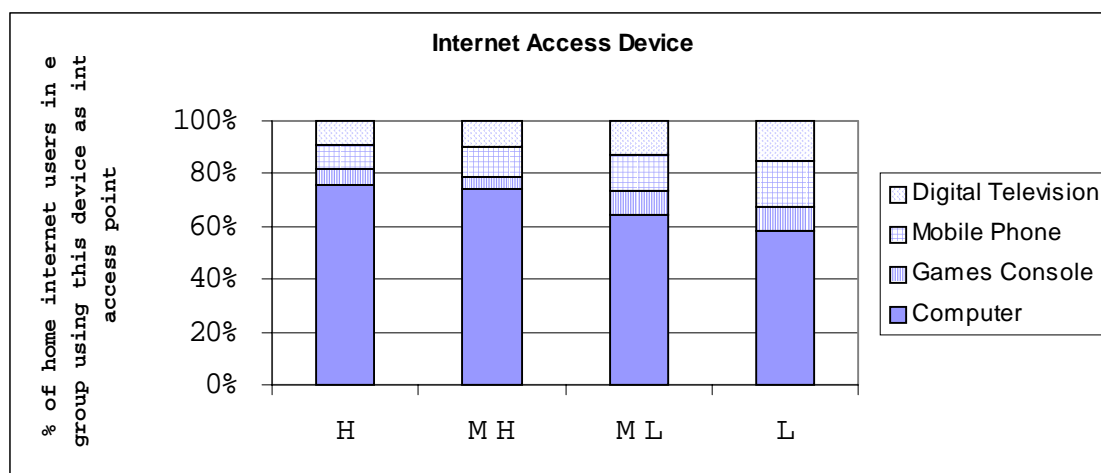


Fig 27. Types of Internet Access Device x Socio Economic Area (home internet users: high = 344, medium-high = 224, medium-low = 348, low = 96)

If we look at ways in which internet use in the home is patterned we see similar patterns to computer use. In most of the activities respondents from from the lowest socio-economic areas reporting the highest frequencies of use. The exceptions to this pattern are in the areas of looking up information for school and revising for exams and tests where again respondents from the second lowest socio-economic areas report highest levels of use (as with computer use for schoolwork). Very similar levels of use for all areas were, however, reported for using the web for fun and for email

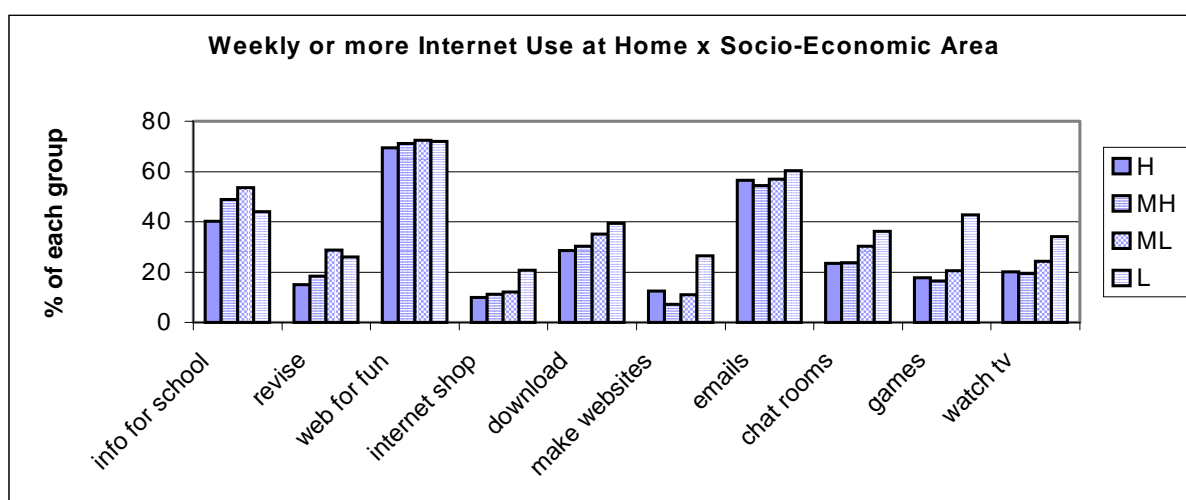


Fig 28. Types of Internet Use at Home x Socio Economic Area (home internet users: high = 344, medium-high = 224, medium-low = 348, low = 96)

### 5.7: Socio-economic area: Mobile Phone Use

Socio-economic areas also seem to have some bearing on patterns of mobile phone use with respondents from the highest socio-economic area less likely to use a mobile phone than children from all three other areas (H 78%, MH 90%, ML 87%, L 92%).

Similarly, amongst phone users we see a pattern of use emerging in which frequency of use is mapped onto socio-economic area, with respondents from the higher socio-economic areas also less likely to use the phone on a frequent (once a week or more) basis than those from the lower socio-economic areas.

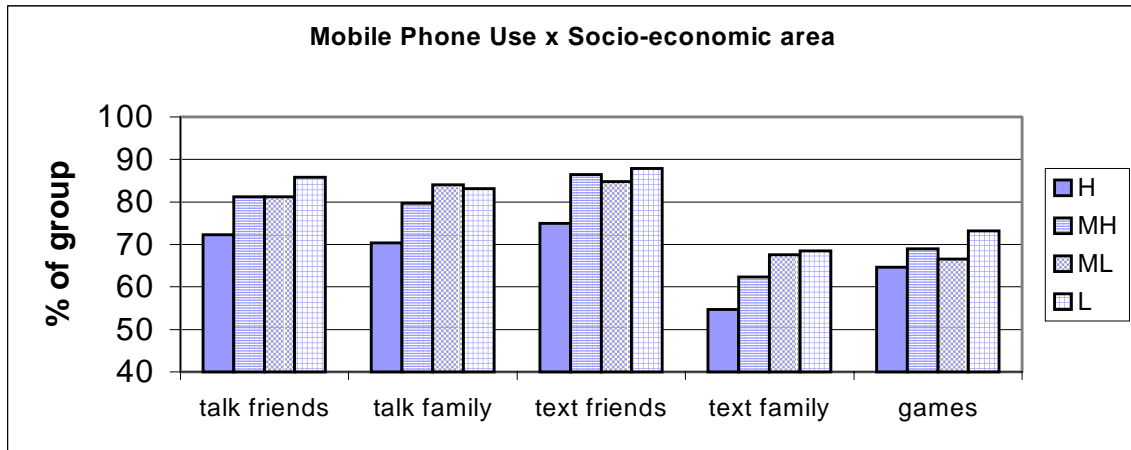


Fig 29. Types of mobile phone use x socio-economic area ((Mobile phone users: High n=343, Medium-high n=288; Medium-low n=459, low n=145)

### 5.8. Socio-economic area: Computer and Internet use at school

As with out of school computer use young people from the lowest socio-economic area consistently report higher frequencies of use of the computer and internet for many activities in school with the differences most notable in the activities of ‘writing’, ‘making or using charts, graphs and tables’ and ‘fiddling around’. It is in the activities of sending emails, looking up information on the internet or using the internet to revise that again we see the pattern whereby the respondents from the middle-low group report higher levels of use. It is only in the area of making music that we see respondents from the highest socio-economic group reporting higher levels of use, and even this is only a negligible difference.

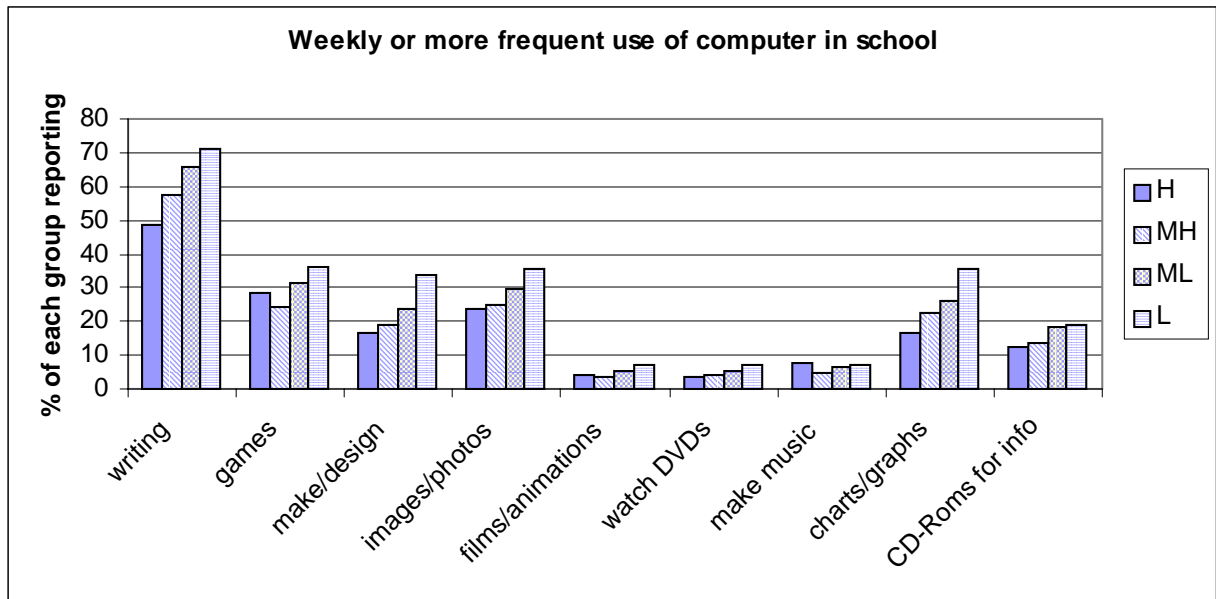


Fig. 30 Computer Use in School (1) x socio-economic group (Full Sample, Hn=436, MH n=319, ML n=525, L n=158)

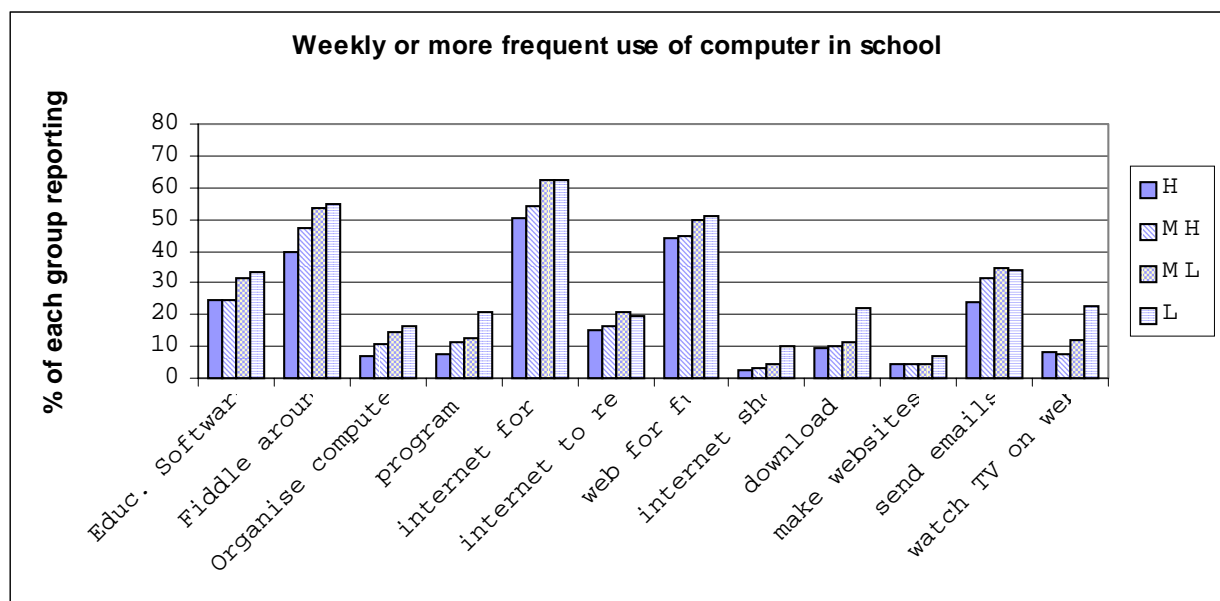


Fig. 31 Computer Use in School (2) x socio-economic group (Full Sample, Hn=436, MH n=319, ML n=525, L n=158)

## 6: Year Group

### 2.6 (Full Sample: Yr 5 n=195; Yr 7 n=752; Yr 10 n=640, Yr 12 n=231)

This section will discuss the differences in computer and internet access and use between the different year groups represented in the sample: years 5,7,10,12. When we look at the results from this section, the differences between age groups in certain areas of access and use seem to be more substantial than those between boys and girls, or between respondents from different socio-economic areas, suggesting that age and school career are impacting on computer and internet use outside school in significant ways.

#### 6.1 Year Group: Technology Ownership in the Home

When we consider home ownership of technologies we can see a clear patterning in levels of ownership of computers and computer related peripherals by year group of respondent, with younger children less likely to report ownership. In contrast, when we consider other media, Digital Televisions and Consoles, the oldest year group is less likely to report ownership, with the youngest year groups (5 and 7) more likely to report personal console ownership.

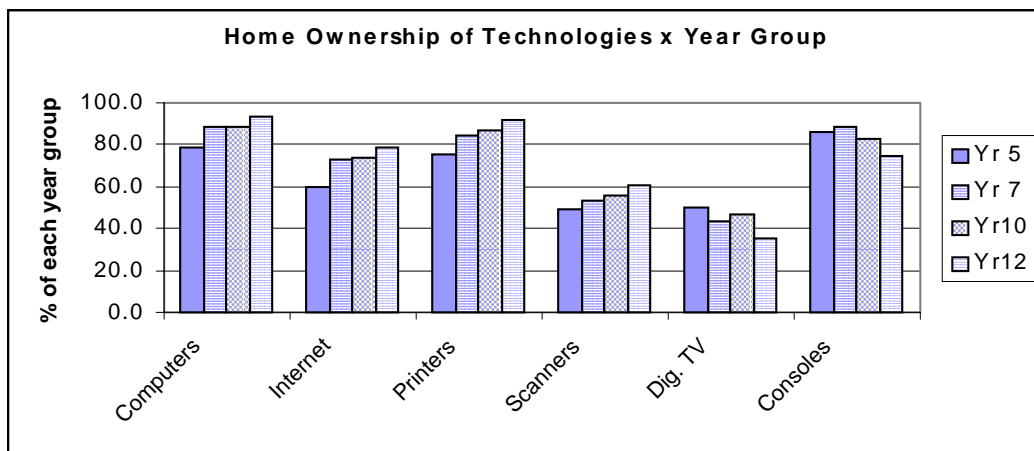


Fig 32. Home Ownership of Technologies x Year Group (Full Sample: Yr 5 n=195; Yr 7 n=752; Yr 10 n=640, Yr 12 n=231)

When we look at personal ownership of technology a similar pattern emerges, with higher percentages of the older age groups reporting personal ownership of computers and calculators. Although the largest difference occurs between primary (Year 5) children and secondary children in respect of mobile phone ownership. Personal ownership of internet connected mobiles is also patterned by age. In contrast, respondents from year 7 were more likely to report ownership of consoles and electronic organisers than other year groups.

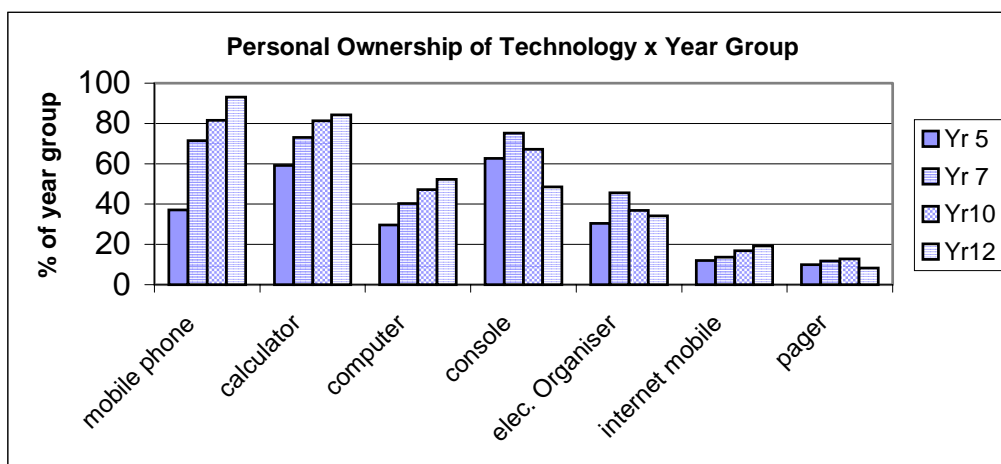


Fig 33. Personal Ownership of Technology x Year Group (full sample, Yr 5 n=195; Yr 7 n=752; Yr 10 n=640, Yr 12 n=231)

### 6.2 Year Group: Computer Access in the Home

There is a marked correlation between year group and location of the computer in the home in respect of the likelihood of children having computers in their own bedrooms, with children from older age groups much more likely to report this than those from younger age groups. Similarly, children in year 12 are less likely to report that the computer that they use is in someone else's bedroom.

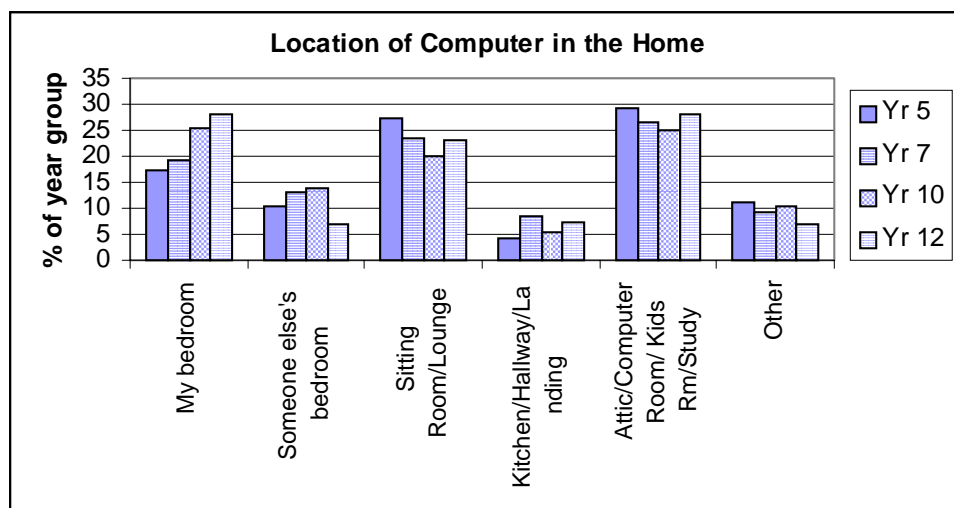


Fig 34. Location of computer in the home x year group (home computer users: yr 5 n=148, Yr7 n=655, Yr10 n=566, Yr 12 n=216)

### 6.3 Year Group: Locations of computer use outside school

Looking at where respondents reported using a computer outside school it was clear that for the secondary age group, the home was the most important site of use. In contrast, for the Year 5 respondents, use of the computer at home was nearly matched in frequency by use of the computer at relatives or friends houses. Notably, the lower levels of year 5 children reporting weekly or more computer use at home does not match onto the figures for home computer ownership, as nearly 80% of year 5 children reported a computer at home. Computer use at friends houses and relatives houses also notably decreases with age, and use of the computer in public sites such as libraries/museums or youth groups seems to be most frequent amongst the year 7 age group.

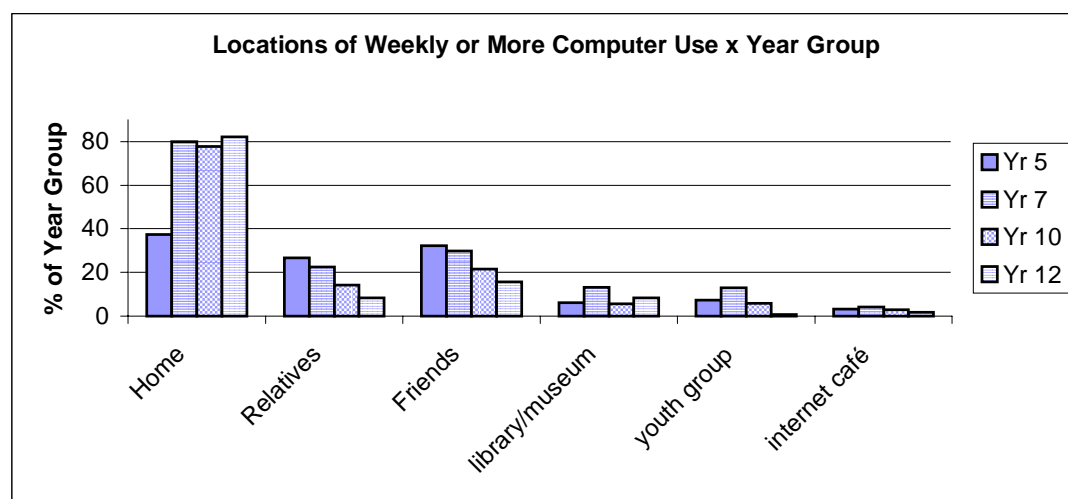


Fig 35. Location of Computer Use x Year Group (full sample, Yr 5 n=195; Yr 7 n=752; Yr 10 n=640, Yr 12 n=231)

### 6.4: Year Group: Computer Use at Home

The use of the computer at home for the generic categories of 'fun' and 'schoolwork' are clearly patterned by age. When we consider uses of the computer for fun – while almost no children in any age group report never using a computer for this, a higher percentage of year 5 and 7 report usage (at least twice a week or more) than those from years 10 and 12. It is in the area of using the home computer for school activities, however, that differences are most clearly marked. In year 5, for example, more children report never using the computer for school work than those who report using it at least twice a week or more, suggesting a wide frequency distribution for this group. Use for schoolwork also increases in a clear pattern with age, with almost 50% of year 12 respondents reporting using the computer for schoolwork at least twice a week or more compared with just over 20% of year 5 respondents.

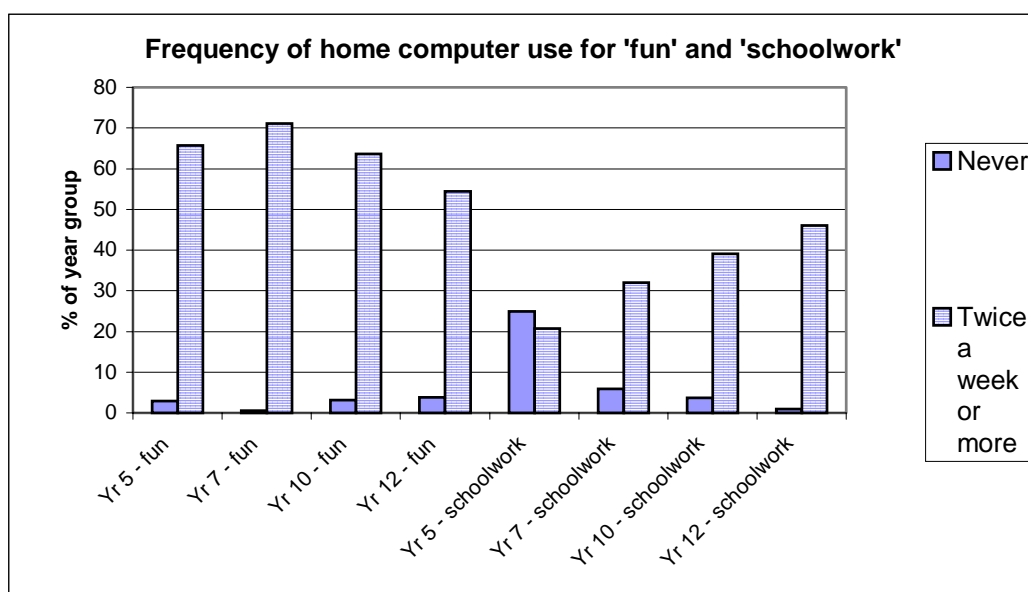


Fig 36 Use of the computer for 'fun' and 'schoolwork' x year group (home computer users: yr 5 n=148, Yr7 n=655, Yr10 n=566, Yr 12 n=216)

When we look at the more detailed activities respondents were asked to report on, we see similar patterns emerging.

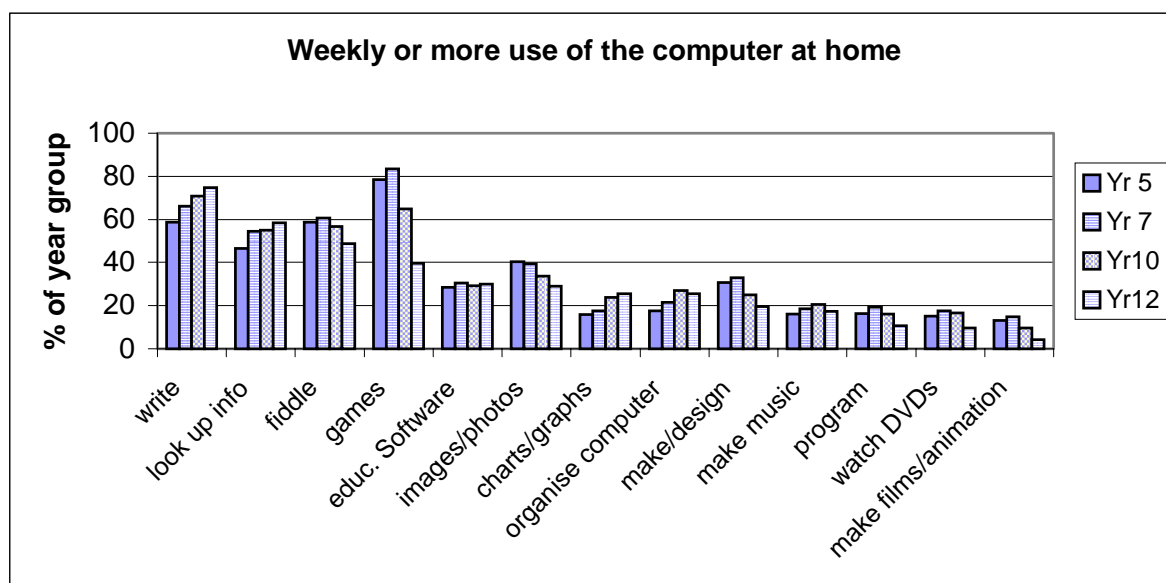


Fig 37 Use of the computer at home x year group (home computer users: yr 5 n=148, Yr7 n=655, Yr10 n=566, Yr 12 n=216)

Certain activities are reported by a higher percentage of respondents as age increases, for example, writing, looking up information and making or using charts/graphs/tables, all of which could be associated with school activities (although not necessarily). In contrast we see major differences in the percentages of respondents from each age group reporting games play on a weekly or more basis – amongst years 5 and 7 approximately 80% of children report this activity, by year 12 it has decreased to only 40%. Similarly, we see a different pattern of use around more creative approaches to computer use such as ‘fiddling around to look at different things’, playing with images/photos and making/desinging things, all of which seem to decrease with age. Certain activities remain relatively constant across age groups, such as educational software use or making photos. Could this suggest that computer use in the home comes increasingly to be dominated by school-directed activities as the children get older?

### 6.5 Year Group: Locations of internet use outside school

There are certain similarities between locations of internet use and locations of computer use. The importance of the home as the key point of access, for example. Interestingly, while computer use amongst year fives was almost as likely to take place at friends and relatives houses as the home, *internet* use for year five is more likely to take place at home. Year 7 respondents continue to report higher use in sites such as museums and youth groups than other year groups, it is also this age group that reports higher use at friends houses for the internet, than other groups.

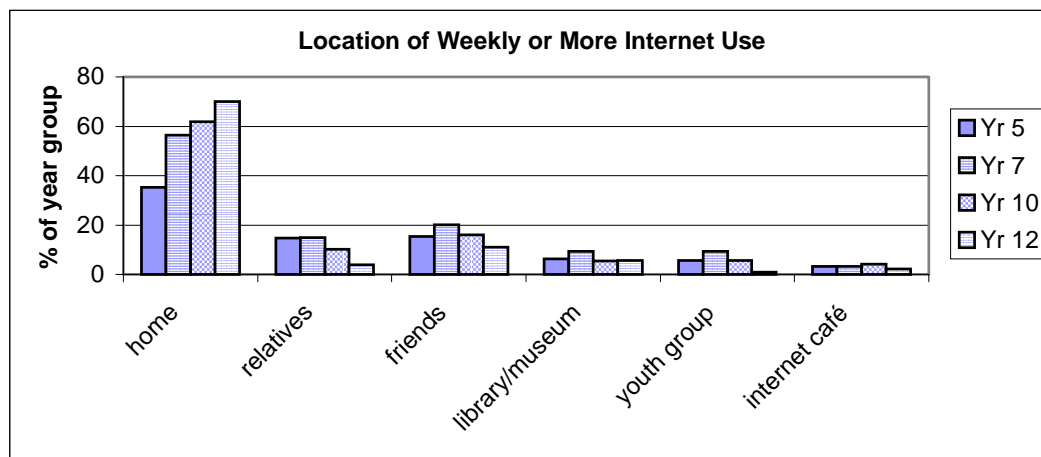


Fig. 38. Location of Internet Use x Year Group (full sample, Yr 5 n=195; Yr 7 n=752; Yr 10 n=640, Yr 12 n=231)

### 6.6 Year Group: Internet Access in the home

There are clearly issues concerning age when looking at questions of internet access in the home. Younger children are more likely to report, for example, needing parental permission, needing to wait for parents to set up the internet or (in the case of year 5) needing to wait until parents can accompany them when they go on the internet. These results suggest that internet use is likely to be subject to a degree of parental monitoring that is age-dependent as these differences in responses between age groups are much greater than the differences in responses according to gender or socio-economic area of respondents.

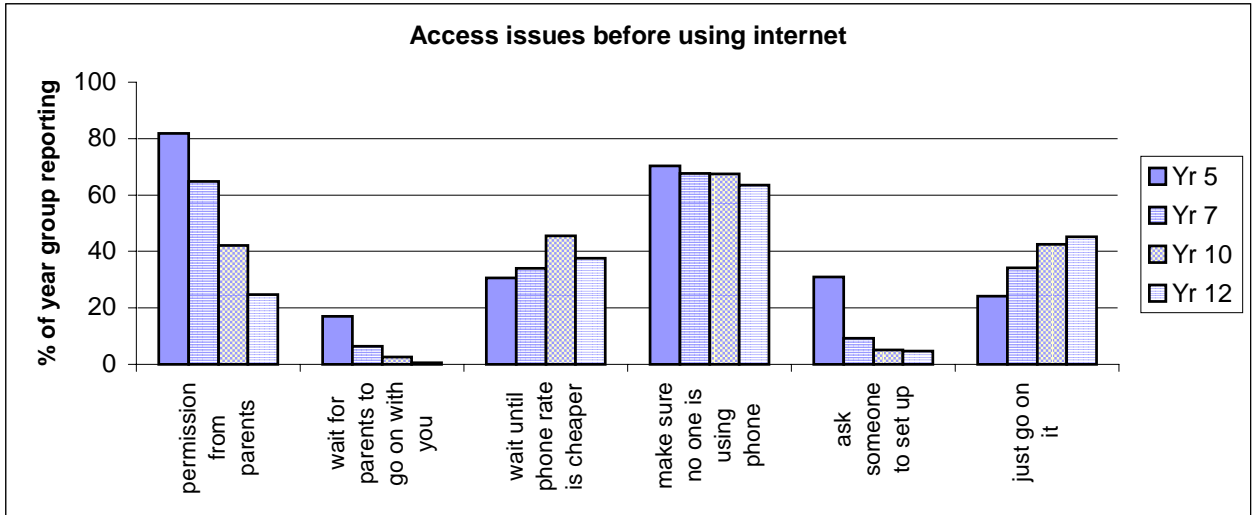


Fig 39. Accessing the internet at home (home internet users: Yr 5 n=98, Yr 7 n=527, Yr 10 n=470, Yr 12 n=179)

### 6.7 Year Group: Internet Use in the home

When looking at the specific activities the respondents reported, there are again age differences which emerge. If we look at school related activities (looking up information for school on the internet, revising on the internet) for example, we see a higher percentage of the older age groups reporting these activities on a weekly or more frequent basis. In contrast, for communications activities, year 10 is the age group likely to report highest usage of emails and chat rooms. This age group is also more likely to report downloading software and music. If we specifically look at the entertainment functions of the web – browsing for fun, playing network games, watching TV/listening to the radio, we see years 7 and 10 reporting higher levels of use than years 5 and 12. Year 5 is least likely to report all activities with the notable exception of making websites and playing network games.

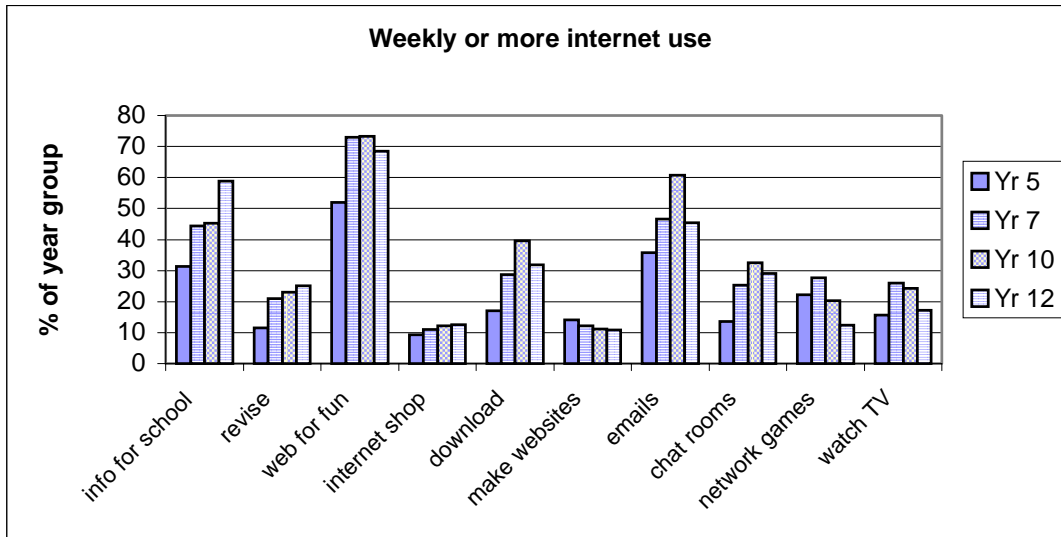


Fig 40. Using the internet at home (home internet users: Yr 5 n=98, Yr 7 n=527, Yr 10 n=470, Yr 12 n=179)

### 6.8 Year Group: Resources Supporting Computer Use

The older the age group, the more 'self-reliant' the respondents were likely to be when confronting problems on the computer at home, increasingly reporting playing around rather than turning to parents as a strategy to solve problems. Interestingly, however, where we saw a higher percentage of the younger year groups reporting computer use in friends houses than older year groups, when we look at what young people are likely to do when they get stuck using the computer at home, friends are reported as a resource by more respondents from the older age groups than the younger age groups. We also see this pattern mirrored when we ask children who they have conversations with about technologies, with the older age groups reporting higher frequencies of conversations with friends about technologies than the younger age groups.

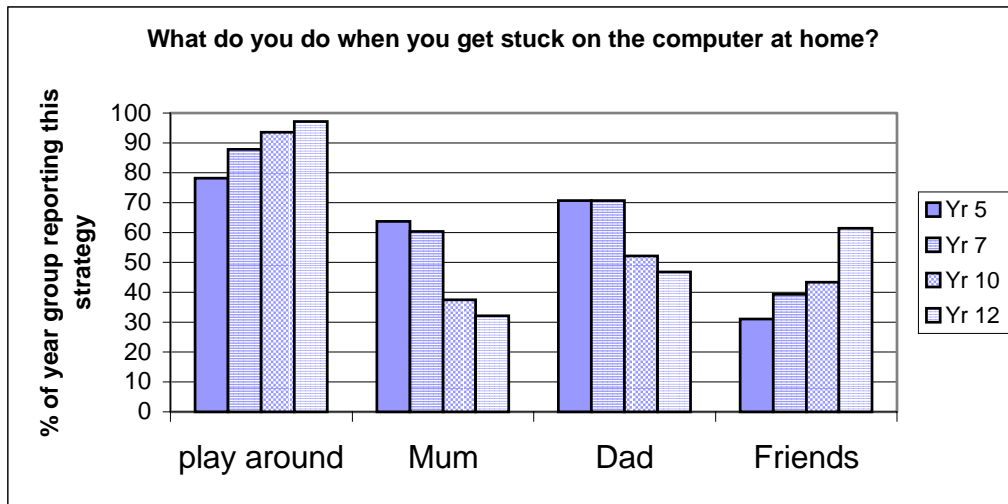


Fig 41. Strategies to solve problems with the computer at home (home computer users: yr 5 n=148, Yr7 n=655, Yr10 n=566, Yr 12 n=216)

### 6.9: Year Group: Computer/Internet activities in school

Overall we see a pattern of computer and internet activities in school by year group in which year 12 frequently reports the lowest levels of weekly or more frequent use, often lower than respondents in year 5. The exceptions to this are in emailing and using the internet to revise, which more year 12 respondents report than any other age groups and in downloading software, using charts/graphs, using the internet for information and browsing the web for fun, where the year 12 levels are above those of year 5. In general, however, year10 appears to be the year in which the highest percentages of children report weekly or more use with the exceptions of playing games, using educational software and using CD-Roms, which year 5s report higher levels of use for.

If we compare years 5 and 7, we see in some instances a drop in the percentages of children reporting use in school in year 7 compared with year 5. This occurs with games/writing/charts & graphs/using CD-Roms/using educational software and fiddling around. However, we see a relative increase between years 5 and 7 in the areas of using the internet to revise, browsing the web for fun, sending emails and downloading software/music.

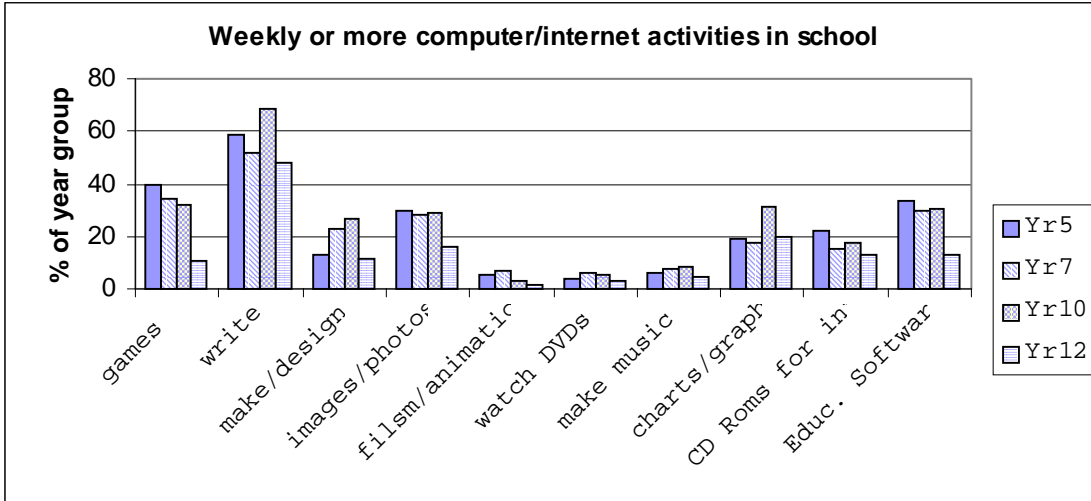


Fig 42 Computer/Internet Use in School (1) x Year Group (full sample, Yr 5 n=195; Yr 7 n=752; Yr 10 n=640, Yr 12 n=231)

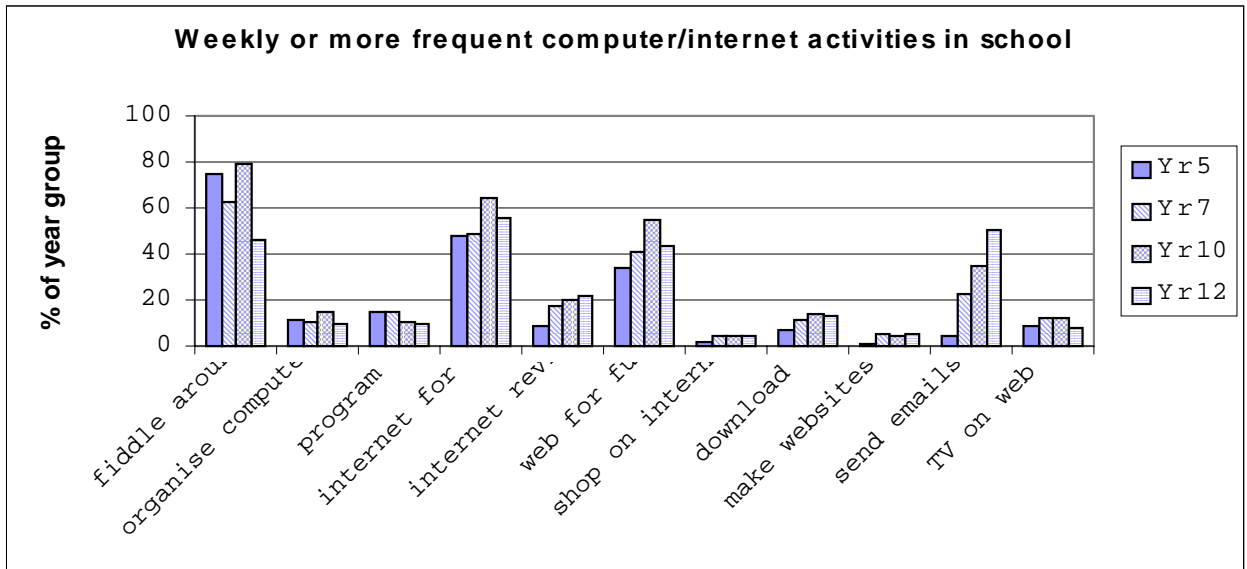


Fig 43 Computer/Internet Use in School (2) x Year Group (full sample, Yr 5 n=195; Yr 7 n=752; Yr 10 n=640, Yr 12 n=231)