Mapping the Digital Divide in Britain: implications for learning and education

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Abstract

The Internet presents many potential opportunities for people to learn for both formal and informal purposes. However, not everyone is able to make the most of the Internet for learning. This paper utilizes quantitative nationally representative survey data of Internet use in Britain in order to explore the digital divide in relation to learning activities online. The results from this analysis give a detailed picture of the digital divide in Britain; illustrating those who are non-users and users of the Internet and the reasons that are important in explaining the diversity in non use and use of the Internet for learning (e.g. age, educational background, skills, attitudes and experience). The findings may assist in the development of policies that seek to support under-served groups to make the most effective use of the Internet for formal and informal learning opportunities.

Keywords: digital divide, new technologies, Internet, Internet use, learning, education

Introduction

The prevalence of new technologies, globalisation, information flows and information workers are key characteristics of today's society (Dearnley and Feather 2001); and have significant implications for education and learning. Individuals are now required to learn throughout life, be more flexible and adaptable in their careers and to update and develop their skills to meet the needs of the economy. At the same time, new technologies are increasingly becoming and being promoted as an important part of achieving these and other learning goals (e.g. Becta 2008). At school, college, university, work and in the home the use of new technology is now one way to facilitate learning for all kinds of purposes.

Of course, the use of the Internet and other new technologies is not a panacea for learning and education. Yet it is reasonable to argue that there are numerous possibilities for people to learn when using the Internet and other new technologies; and if this is the case, then ideally everyone should have the opportunity to use the Internet for learning should they wish to do so (Selwyn and Facer 2007). However, there is significant diversity in the British population in the ways that people access and use new technologies (if at all) (e.g. Dutton et al. 2007) and this diversity, or digital divide, has attracted a great deal of attention in recent decades from policy makers and academics.

The digital divide can be defined as the differences between those who have all the necessary resources to participate in current society and those who do not (Chen and Wellman 2004). Where once the digital divide was seen primarily as a distinction between those who did, and those who did not, have access to a particular

technology it is now seen as a more multifaceted phenomenon. The digital divide is no longer viewed as a dichotomous categorisation between the haves and have nots, but is instead defined as a continuum of access and use where multiple interrelating reasons such as attitudes, skills, quality of access and social support are at work in explaining if, and how, people use new technologies (Van Dijk 2005).

In Britain there have been a number of initiatives to try to reduce or overcome the divides primarily by providing access to computers and the Internet in schools, some homes and community centres, and a certain level of support. These include the introduction of UK online centres in 1999, the Computers for Pupils initiative (DfES, 2006) and the recent Home Access Programme (DCSF, 2008). Not all the initiatives to try to reduce the digital divide are necessarily focused on education and learning as there are other perceived potential social benefits of using new technologies, yet education is an important part of this debate.

Reducing the digital divide is a complex task, particularly as it is a constantly shifting target. Thus, it is valuable to regularly track the current digital divide in Britain in order to understand patterns of use and non use of technology within the population. Here the focus in on access and use of the Internet. Using nationally representative data from the Oxford Internet Surveys (OxIS) this article will examine the factors that explain whether people use the Internet or not; and, if they do use the Internet, what factors are relevant in using the Internet for formal and informal learning activities.

The remainder of this paper is divided into four main sections: first a summary of the methods are provided; next the results from the analysis of the

survey data are presented; then the key findings are discussed; and the paper concludes by highlighting the key issues that need to be considered by educationalists.

Method

The data upon which this article is based is taken from the 2003, 2005 and 2007 Oxford Internet Surveys (OxIS), carried out by the Oxford Internet Institute, University of Oxford, which provides authoritative information on Internet use in Britain. The surveys are multistage probability sample surveys of individuals 14 years and older, and are carried out face to face. The 2003 survey was carried out in May and June of 2003 with 2030 respondents (a 66% response rate); the 2005 survey was conducted in February 2005 with 2185 respondents (a response rate of 72%); and the 2007 survey was conducted during March and April 2007 with 2350 respondents (a response rate of 77%). Areas covered in the survey include information about: Internet users (who uses / doesn't use the Internet, and how they gain access to it); Internet uses (including e-learning, e-government, e-entertainment and e-finance); and impacts of the Internet on everyday life (including changing habits and practices, privacy concerns and attitudes to technology).

Statistical analysis of the OxIS data was conducted using SPSS to examine the current levels of Internet use, and use of the Internet for learning opportunities by people in Britain; and the factors that are most important in influencing these activities.

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The OxIS asks a number of questions about the kinds of activities people carry out online. From a factor analysis of these questions 12 different types of Internet use were identified: fact checking, formal learning or training, finding out about current affairs and interests, travel, finance, shopping, entertainment, social networking, diary functions, person to person networking, e-government and civic participation (for more details please see Helsper and Eynon, in press). Clearly, all of these activities potentially have possible learning benefits. However, for the purposes of this paper online learning activities will be operationalised as the three factors that seem the most closely related to learning: fact checking (using the Internet to look up a definition of a word or checking a fact); formal learning or training (looking for jobs, distance learning for an academic degree, getting information for a school related project, getting information for a work related project, finding out opportunities for further study) and current affairs and interests searching (news, sports, local events, health).

Bivariate analysis, logistic and linear regression were used to examine the factors that are significant in predicting whether an individual uses the Internet and engages in one of these three kinds of online learning activities. Demographic, experience and attitudinal explanatory variables were selected on the basis of previous work in this area (e.g. Broos and Roe 2006; DiMaggo and Hargittai 2001; Haythornthwaite 2007; Livingstone and Helsper 2007; Van Dijk 2005; Selwyn and Facer 2007). They were: age, income, level of education, geographical location, Internet experience (i.e. the amount of time a person has been using the Internet), perceived level of Internet skill, attitudes towards Information and Communication Technologies (ICTs), whether or not there were children in the household and if they

had Internet access at home. The results of all data analysis are summarized in the tables and figures below.

Results

This section provides an overview of the digital divide in Britain; illustrating those who are non-users and users of the Internet and the factors that are important in explaining use and non use of the Internet in general and for learning activities. The results are summarized in two main sections: the first focuses on who uses the Internet and who does not and the second explores the use of the Internet for learning.

Use and non use of the Internet

[TABLE 1 ABOUT HERE]

In 2007 67% of people in Britain were Internet users, accessing the Internet either from home, work, school or college, a public library or an Internet café; as compared with 61% in 2005 and 59% in 2003 (table 1). Socio economic variables play an important part in understanding who does and does not use the Internet. For example, Internet use is more common for those who are better off; in 2007 91% of those whose income was over £50000 per annum were Internet users compared with only 39% whose income is below £12500. Age is also an important factor. In 2007 90% of people aged 14-17 and 86% of people aged 18-24 used the Internet compared with 58% of people aged 55-64, 37% of people aged 65 – 74 and 25% of people aged 75

and older. Perhaps not surprisingly general attitudes towards ICTs[1] are related to use

and non use of the Internet. Of those who have a negative attitude 16% use the

Internet compared with 91% of those people with a positive attitude.

Thus, in 2007 around a third of the population did not use the Internet.

However, it is not a straightforward distinction between use and non use. In 2007, 5%

of those who did not use the Internet were lapsed users, i.e. people who had once

used the Internet but now do not. Interestingly, non-users and lapsed users may still

have some kind of access to the Internet in the form of intermediaries. In 2007 73%

of non Internet users "probably" or "definitely" knew someone who would use the

Internet on their behalf (compared with 70% in 2005). This percentage was even

higher for lapsed users - 88% of this group "probably" or "definitely" knew someone

who would use the Internet on their behalf compared with 84% in 2005 (Dutton and

Helsper 2007).

While these descriptive statistics are valuable, it is also useful to look at the

independent effect of each of these factors to identify what is important in

understanding use and non use of the Internet. From the results of the logistic

regression (table 2) positive attitudes towards ICTs, having a higher level of

education, a higher level of income and being younger are all positively related to

being an Internet user.

[TABLE 2 ABOUT HERE]

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[1] This measure was constructed from participants' responses to 10 items designed to measure their attitudes towards the Internet and related technologies.

Thus, use of the Internet is shaped by socio economic, demographic and attitudinal factors. Many non Internet users can also be seen as proxy users as they have access to others who would use the Internet on their behalf.

Use of the Internet for learning

The ways in which people choose to use a particular technology can vary significantly (Dijk 2005). As noted above, here we are interested in using the Internet for learning, focusing on 3 particular categories: formal learning and training activities, fact checking, and searching for current affairs and interests. Each of these activities will be explored below using the OxIS 2007 data with respect to the following factors: quality of physical access to the Internet, demographic and socio economic factors, experience of using the Internet, and skills and attitudes towards ICTs.

Physical access

Physical access to the necessary hardware or software and the quality of that access (e.g. in terms of speed, quality of the hardware / software (Dijk 2005) and the location of access (DiMaggo and Hargittai 2001)) are important factors to consider. Access and use of the Internet is becoming more pervasive and increasingly domesticated. In 2003, 53 per cent of Internet users had home access compared with 94 per cent of Internet users in 2007 (Dutton and Helsper 2007). From bivariate analysis (table 3) home access does have a significant role in explaining who uses the Internet for some of these learning activities. In 2007, 68% of Internet users without home access used the Internet to check facts compared with 83% of Internet users

with Internet access at home. Similarly, 77% of those Internet users without home access used the Internet to find out about current affairs compared with 90% of those users with Internet access at home. Interestingly, home access is not significant for using the Internet for training and other formal learning activities.

[TABLE 3 ABOUT HERE]

Broadband diffusion has escalated from 19% of households with Internet access in 2003 to 85% of households in 2007 (Dutton and Helsper 2007). Broadband access is significantly related to whether people carry out learning activities online. In 2007 79% of Internet users with broadband undertook at least one training activity compared with 70% of those Internet users without broadband, 92% of broadband users looked at current affairs compared with 81% of those without broadband and 85% of those with broadband checked some form of fact compared with 70% of Internet users without broadband access (table 3).

Thus, it seems that quality of physical access (i.e. in terms of home connections and broadband connections) is important in understanding which Internet users are likely to use the Internet for learning activities.

Demographic and socio economic factors

Similar to use and non use of the Internet, demographic and socio economic variables help us to understand who uses the Internet for these three kinds of learning

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activities. Age, gender, life stage, income, social grade[2], education, whether someone lives in rural or urban area and whether or not they have children in the household are all important factors to consider (table 3).

For example, age is a significant factor in explaining online learning activities. 94% of Internet users aged 14-17 carry out some form of formal learning or training activity compared with 83% of 25-34 year olds and 53% of those aged 65 and over. A similar pattern can be found for fact checking with 92% of Internet users aged 14-17 using the Internet for this activity compared with 69% of those aged 65 or over. The relationship between age and the use of the Internet to look up current affairs has an inverted U pattern with 86% of 14-17 year olds undertaking this activity, rising to 92% of 35-55 year olds and then falling again to 81% for those over 65.

Other important factors are a person's life stage, an individual's household income, social class, and level of education. Those who are studying or working, better off, from the higher social classes and have a higher level of education are more likely to use the Internet for each of the three types of learning activity (table 3).

Of lesser significance are gender, location and whether the Internet user has children or not (although they are all still important). In terms of gender, men are significantly more likely to undertake training or current affairs activities online

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2 Social grade is the socio-economic classification developed for and by the market research industry. It is a six point scale based on the occupation of the chief income earner in each household.

compared with women. The pattern is similar for fact checking but there is less difference between the proportion of men and women carrying out this activity. Whether or not an Internet user lives in a rural or urban location is also significant particularly for formal learning or training but also for fact checking with more Internet users from urban locations engaging in these kinds of online activities but not for using the Internet for current affairs.

Finally, as family learning is becoming an important policy issue (Becta 2008; NIACE 2007) it is interesting to look at the extent to which having children in the household affects whether an Internet user uses the Internet for learning. For formal learning or training activities it does seem to be important with 82% of Internet users with at least one child in the household using the Internet for training activities compared with 73% who do not have children; and a similar pattern can be seen for fact checking where 85% of those with children in the household use the Internet for checking facts compared with 80% of Internet users who do not have children. However, this difference is not seen in using the Internet for current affairs.

Thus, from the bivariate analysis, it seems that even once online, existing divides in income, education, class, life stage, age and to some extent location and gender still remain. However, on a more positive note, there appears to be some support for the promotion of using the Internet for family learning.

Internet experience

The amount of experience a person has in using the Internet can be an important factor in explaining types of Internet use, as the more experienced someone is the

more resilient they are likely to be to problems and may be better able to help themselves. For the purposes of this study the level of an individual's Internet experience is operationalised as the amount of time a person has been using the Internet. In OxIS 2005, 67% of Internet users were "middle range" users, that is, Internet users who had been using the Internet for more than 1 but less than 5 years; 25% were "veterans", that is, had been using the Internet for over 5 years; with the remaining 8% are defined as "novices", that is, people who had been using the Internet for less than a year. Unsurprisingly, the number of veterans identified in the 2007 OxIS survey has increased; 41% of users are classified as veterans, 47% as "middle range" users and the remaining 12% as novices (Dutton and Helsper 2007).

Greater Internet experience is positively and significantly related to using the Internet for online learning activities. In the OxIS 2007 survey 63% of those who had used the Internet for less than 1 year had used the Internet for training compared with 75% of those who had used the Internet for 2-5 years and 87% who had used it for more than 5 years. Similarly significant patterns were found for using the Internet for fact checking and for looking up current affairs and other interests (table 3). Thus, the more experienced people are in using the Internet the more likely they will be to take up these kinds of opportunities online.

Internet skills

There are a variety of aspects relevant to the skills required to use the Internet effectively which include operational skills, managing the hardware, and software and search, select and process skills (Dijk 2005). The level of skills people have is likely to be related to what they then do online. Similar to other studies (e.g. Broos

and Roe 2006), this paper uses a measure of perceived skills to use the Internet as opposed to a measurement of actual skills. While a measurement of actual skills is desirable, this is difficult to measure reliably in a survey.

In OxIS participants were asked to rate their level of Internet skill on a scale from bad to excellent. As the range of activities people can do online has grown in number and complexity, individuals' perception of their skill level has remained fairly constant from 2003 to 2007. In OxIS 2003, 60% of Internet users rated themselves as good or excellent and 8% rated themselves as bad or poor; in the OxIS 2005 survey 66% of Internet users rated themselves as good or excellent and 4% rated themselves as bad or poor; and in 2007 survey 62% of Internet users rated themselves as good or excellent and 5% rated themselves as bad or poor.

Perceived Internet skill is positively and significantly related to use of the Internet for learning activities: in 2007 of those Internet users who rated themselves as bad or poor 42% carried out some form of formal learning or training activity on line compared with 67% of those Internet users who rated themselves as fair, 84% who rated their skills as good and 93% of those who rated their skills as excellent. While the difference is most marked for training activities, similarly significant relationships are also apparent for fact checking and using the Internet to look up current affairs and interests.

Attitudes towards ICTs

As noted above, a measure of attitudes towards technology was constructed from participants' responses to questions about their attitudes towards the Internet and

related technologies. Those Internet users with more positive attitudes are significantly more likely to use the Internet more for learning activities. Around half, 51% of those with negative attitudes towards ICTs used the Internet for training compared with 83% of those Internet users who had a positive attitude. Likewise, 59% of those who had a negative attitude would look up facts compared with 89% of those with positive attitudes towards ICTs (table 3).

Key factors in explaining Internet users' use of the Internet for learning activities

Thus, from the bivariate analysis, those Internet users who have home access, are better off, better educated, have higher incomes, who have used the Internet for longer, are more confident in their perceived skills and have a positive attitude towards the Internet tend more often to use the Internet for learning. In addition to these bivariate analyses, linear regression was also conducted to explore the independent effect of these factors using training, fact checking or looking up current affairs as dependent variables (table 4).

[TABLE 4 ABOUT HERE]

For fact checking, the most significant variables are perceived Internet skill and education, followed by attitudes towards ICTs, income, experience (i.e. amount of time) using the Internet and age. Thus those Internet users who perceive themselves as having a higher level of Internet skill, who have higher levels of educational experience, have more positive attitudes towards ICTs, have higher incomes, have used the Internet for longer, and are younger are more likely to use the Internet to check facts. For formal learning or training activities, level of education,

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age, perceived Internet skill and experience are all highly significant. For using the

Internet for current affairs checking, perceived Internet skill and education are again

highly significant followed by income level and being male. While a number of

factors are important for each kind of learning activity, higher levels of education and

greater perceived skill in using the Internet are highly significant across all types of

online learning activity.

Discussion

The data reported here supports other work that demonstrates access and use of new

technologies tends to reinforce and replicate existing social inequalities (Green et al.

2005; Dutton and Helsper 2007). Those who use the Internet are more likely to have

more positive attitudes towards ICTs, have a higher level of education, a higher

household income, and be younger. However, it is perhaps important to stress that

digital exclusion is not fully explained by social economic reasons. Indeed, other

research has shown that there are a group of people (around 4% of the British

population) who are categorised as being deeply socially excluded but are using the

Internet (Helsper 2008).

Not all non-users of the Internet are the same. Around 5% of non-users once

used the Internet and now do not (Dutton and Helsper 2007). There are some non-

users who do not use the Internet because of economic and / or social reasons but there

are also people who make an informed "digital choice" not to use the Internet (Dutton

et al. 2007; Helsper 2008). This complexity suggests that non-users should not simply

be treated as one large homogeneous group but that policies need to be developed to

support different groups of non-users. The high proportion of non-users of the Internet

and lapsed users who have access to others who are willing to use the Internet on their behalf is a positive sign for overcoming digital divides. For example, intermediaries may facilitate non-users benefiting economically from the cheaper deals for goods that are often available on the Internet. However, in terms of learning opportunities this kind of proxy use is unlikely to be sufficient for any kind of sustained learning activity.

The number of Internet users who already use the Internet for the three types of learning opportunities that are the focus here is relatively high (77% for formal learning or training, 82% for fact checking and 90% for current affairs). However, demographic, socio economic, perceived skills, experience and attitudinal factors are still important in understanding who uses and does not use the Internet for these activities. Similar to other research, once people are online they do not all use the Internet in the same way and divides in terms of kinds of use of the Internet still remain (Van Dijk and Hacker 2003; Selwyn and Facer 2007). Thus similar to non-users, it is unwise to see all Internet users as the same when aiming to support people in using the Internet for learning. Perhaps not surprisingly, education is key here, as the level of a person's education background and perceived level of Internet skill are highly significant factors in understanding which Internet users use the Internet for learning.

The only two variables that were not significant for any of the three learning activities were home access and having children in the household. Home access may not have been significant because of the small percentage of people who use the Internet but who do not have access at home (6% in 2007). Also, as basic home

Internet connectivity increases, then the question around quality of access may become more nuanced, such as whether an individual has personal access to a computer with Internet access or if they have to share. The non significant result for having children in the home is contrary to current policy interest in family learning and related research. Other research has shown that parents often purchase the Internet in their homes to support their child's education (Selwyn 2004) and that in terms of skills young people can sometimes (although not always effectively) support parents uses of ICTs (e.g. Holloway and Valentine 2003; Kent and Facer 2004). While having children in the home does not seem to influence whether adults use the Internet for these three types of learning activity it could be that there are other ways that having children in the home could promote Internet use in ways not explored here. Thus, more research in this area would be valuable.

As noted in the methodology section, one difficulty in this research is to define what we mean by online learning activities. There are two issues. First, the items used here do not truly capture the range of online activities people could learn from, such as: information seeking (Rieh 2004), interacting and communicating via virtual communities or communities of practice (Hew and Hara 2006; Ross 2007), and creating content (Rollet et al. 2007) and this is in part because of the more general focus of the OxIS survey. Second, is that Internet use does not necessarily equal learning. In the OxIS we are measuring what people do online not the cognitive dimension of learning. This issue is a major challenge for all studies of informal learning (Sefton-Green 2004), yet we do need more research to better understand the relationships between use of the Internet and learning and how to measure it. A further interesting line to pursue is the hypothesis that for specific groups it is not necessarily

direct educational uses of the Internet but the use of the Internet for fulfilling basic psychological needs that are most important for positive educational outcomes (Tsikalas and Gross 2002). Nevertheless, the data here provide a valuable insight into how take up of potential learning activities online are shaped by socio economic, demographic, skill and attitudinal factors.

Conclusion

The analysis of the OxIS data above provides an informed understanding of the current digital divide in Britain with a particular focus on who uses the Internet for formal and informal learning activities. The digital divide is not a static gap between the "haves" and "have nots" but is more about complex relative differences between people that are constantly changing (Van Dijk and Hacker 2003).

While the numbers of people in the UK using the Internet are increasing and the Internet is becoming increasingly domesticated, it is clear from this analysis that there are a range of factors in supporting people to use the Internet in the first place (if they wish to) and encouraging individuals to use the Internet for a range of purposes once they are online. Positive attitudes towards ICTs, having a higher level of education and income and being younger are all positively related to being an Internet user in the first place. Once online, those who have higher levels of perceived Internet skill and / or education are more likely to use the Internet for learning.

From this analysis some important issues have emerged for learning and digital divides. Firstly, it highlights the need to begin to segment users and non-users into

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better defined groups in order to support them in appropriate ways. One policy will not fit all non-users or users of the Internet. Secondly, we need to think about the kinds of online activities (if any) that are more beneficial for learning and education that need to be supported or encouraged and how we can measure these. Thirdly, survey data about online activities need to be contextualized in the learning experiences of people in everyday life (Livingstone and Helsper 2007).

Indeed, it is important not just to look at individual factors to explain the digital divide but also the social, political and economic contexts that these individuals operate within (DiMaggio and Hargittai 2001; Van Dijk 2005; Selwyn and Facer 2007). Consideration of these broader factors is complex and can be contradictory. For example, in the US the significant policy push to ensure Internet connectivity in schools has not promoted Internet use as originally hoped for other reasons, such as poor training and a lack of support for teachers (DiMaggio and Hargittai 2001). In addition, there are differences between schools in richer and poorer areas in the way technology is used in class which further exacerbate these difficulties (Warschauer, et al. 2004).

Despite this complexity, similar to other authors in this area (e.g. Selwyn and Facer 2007), this paper suggests that it is possible to make a difference to current digital divides in the UK. As the analysis above has shown it is significantly, but not entirely, shaped by existing patterns of social inclusion and exclusion. Education, perceived skills and attitudes are important, thus there are possible opportunities for intervention both in terms of getting people online and supporting them in using the Internet for learning.

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Tables: Mapping the Digital Divide in Britain

Table 1. Current Internet users (as % of total number of individuals)

Variables	Attributes	2003	2005	2007
Total	*All*	59	60	67
Age	*14-17*	92	94	90
	18-24	76	78	86
	25-34	73	69	78
	35-44	73	69	77
	45-54	66	65	78
	55-64	39	53	58
	65-74	25	31	37
	75+	17	20	25
Life stage	*Students*	98	97	97
	Employed	67	68	81
	Retired	22	30	31
Income[3]	*<£12500*	*	29	39
	£12500-£25000	*	58	64
	£25000-£37500	*	70	82
	£37500-£50000	*	84	88
	£50000+	*	84	91
Gender	*Male*	64	63	70
	Female	55	57	65
Education[4]	*Basic*	52	27	55
	Further	83	66	78
	Higher	89	83	90
Location	*Urban*	*	60	67
	Rural	*	62	66
Attitude towards ICTs	*Negative*	*	*	16
	Neutral	*	*	69
	Positive	*	*	91

OxIS 2003: N=2030 (All respondents); OxIS 2005: N=2185 (All respondents); OxIS 2007: N=2350 (All respondents).

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3 No comparable data for income and Internet use, location and Internet use or attitudes and Internet use is available for 2003

4 Different questions were asked about education in 2005 and 2007. 2007 data are based on analysis of participant's last type of educational institution (school, further education college or equivalent, higher education institution or equivalent) that they had attended or were still attending. Data from 2005 is based on the highest qualification participants had: basic = no qualification, GCSEs or equivalent, further education = A levels or equivalent, higher education = degree, postgraduate degree or equivalent.

Table 2. Logistic regression of use vs non-use of the Internet in 2007

Variables						
				95% CI for exp(b)		
	B	*SE*	*p*	*Lower*	*exp(b)*	*Upper*
Age	-.028	.004	***	.965	.972	.979
Gender (female)	-.025	.122	.839	.767	.975	1.240
Attitudes towards ICTs	1.651	.137	***	3.981	5.211	6.822
Location (urban)	-.125	.193	.517	.605	.882	1.288
Income	.512	.060	***	1.481	1.668	1.878
Education	.657	.093	***	1.608	1.928	2.313

Where B is the unstandardized beta coefficient and exp(b) is the odds ratio
* p< 0.05, ** p<0.01, ***p<0.001,
Model χ^2 (6) =712.267, p<0.001, R^2= .438 (Nagelkerke), correctly predicted = 80%, Base =2350

Table 3. Use of e-Learning in 2007 (as % of total number of Internet users)

Variables	Attributes	Formal learning or training	Fact checking	Current affairs
Total of All Internet Users		77	82	90
Home Access	Yes	77	83	90
	No	72	68	77
Broadband	Yes	79	85	92
	No	70	70	81
Age	14-17	94	92	86
	18-24	87	84	90
	25-34	83	86	92
	35-55	79	83	92
	55-65	62	76	86
	65+	53	69	81
Gender	Male	80	84	91
	Female	75	80	88
Life stage	Student	96	94	91
	Employed	81	84	93
	Retired	45	67	75
	Unemployed	74	66	75
	Homemaker	63	77	88
Income	<£12500	70	75	79
	£12500-£25000	74	76	86
	£25000-£37500	76	85	93
	£37500-£50000	87	87	96
	£50000+	88	90	93
Social Grade	DE	68	71	81
	C1C2	75	82	88
	AB	83	89	96
Education	Basic	68	75	85
	Further	78	83	90
	Higher	92	91	96
Location	Rural	68	76	90
	Urban	78	83	89
Internet experience	< 1 year	63	69	79
	1-2 years	64	79	90
	2-5 years	75	81	87
	>5 years	87	88	95
Perceived Internet Skill	Poor / Bad	42	61	76
	Fair	67	73	85
	Good	84	88	93
	Excellent	93	92	96
Attitudes towards ICTs	Negative	51	57	81
	Neutral	75	80	88
	Positive	83	89	93

OxIS 2007: N=1578 (Internet users).

Table 4. Linear regressions of formal and informal online learning opportunities

	Fact checking			Formal learning / training			Current affairs		
	b	β	*p.*	*b*	β	*p.*	*b*	β	*p.*
(Constant)	.136		0.410	.116		0.712	.336		249
Experience	.047	.070	*	.110	.083	**	.048	.041	0.169
Gender (Male)	-.019	-.012	0.658	-.100	-.032	0.211	.196	.072	**
Age	-.003	-.061	*	-.018	-.178	***	-.003	-.029	0.295
Education	.109	.113	***	.411	.212	***	.163	.097	**
Home access	.100	.032	0.246	-.032	-.005	0.844	.223	.040	0.144
Income	.063	.099	**	.059	.046	0.091	.119	.107	***
Internet skill	.120	.129	***	.351	.188	***	.232	.142	***
ICT attitudes	.121	.080	**	.026	.009	0.750	.121	.046	0.116
R^2=	0.106			.199			0.095		

Base: All Internet Users (N=1,578) Actual N=1253 (due to dropout on income question)

Note. The linear regressions were based on the factor scores for each of these activities

* Significant at p<.05

** Significant at p<.01

** Significant at p<.001