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Real purpose, real audience and real value: researching contributions of digital literacy to learning

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Abstract

Why would learners want to be digitally literate? Digital literacy (in the form of capabilities associated with using social networking sites, creating videos, writing reviews accessible to others, or the making of online news, for example) is reported often as being undertaken by pupils outside, rather than inside, schools. It is often access to specific projects within schools that offer opportunities to develop and use digital literacy capabilities that are focused on school-based subject matter, selected for specific educational endeavours and purposes. Empirical studies show that these opportunities can lead to outcomes not just at a subject level (which might be assessed through more traditional tests or examinations), but across a realm of areas including communication and operational skills, group work and teamwork approaches, ownership and independent learning, technical skills, confidence, interest, and the meeting of deadlines (where forms of assessment other than subject tests are clearly needed). Fundamentally, empirical studies report that projects employing digital literacy afford pupils real purpose, audience and value. Researching this realm of outcomes provides real challenges, both in terms of identification of affordances, and identification of levels of affordances arising.

The scope and focus of this chapter

This chapter looks at outcomes of learning activities when pupils use digital and media literacy capabilities. Technologies continue to change and to be developed; technologies continue to diverge, whilst connectivity continues to converge, so the continuous monitoring of what might constitute capabilities of digital literacy and what might arise from evaluations of leading edge digital literacy activities is an important need. Recent studies have indicated that access to ranges of technologies by young people is generally high, but using technologies is often occurring more frequently outside schools than it is inside schools. Across a range of different groups of young people, different technologies are being used and selected for different purposes. For learning purposes, desktop technologies are often selected and used, but often for information seeking purposes. Evidence indicates that young people are not necessarily developing digital and media literacy practices outside schools that will easily allow them to be involved in important and productive learning endeavours. There is a real need to consider how young people who have high levels of technological access ('digital natives') can be supported so that they can become 'learning natives'. To do this effectively, it will be important to identify which aspects of learning should be focuses for uses of digital literacy. Digital literacy practices and their applications to learning have been related in some studies not just to enhancements in certain areas of subject attainment, but also to enhancements in terms of wider achievements. Aspects of digital and media literacy use offer a wide range of potential affordances, potentially supporting a wide range of different aspects of learning; it is important that we can identify benefits arising from specific applications or affordances, if we are to guide learners, teachers and parents in effectively. It is becoming increasingly recognised that the selection of digital literacy practices and uses can be different for different groups of young people, including differences according to gender. Two exemplars of practice are explored within this chapter, to illustrate the specific affordances, outcomes and impacts that can arise in those learning activities (both involving pupils with different features of digital and media literacy). It is clear that the relationship of affordances, outcomes and impacts to specific activities needs to be identified clearly in the future, to allow a movement away from concepts concerned with generalising affordances and impacts arising, towards a deeper understanding of the identification of specific groups of young people who can benefit in more specific ways. The exploration offered here is largely United Kingdom (UK) focused, but recognises that the identification of exemplars of practice in helping 'digital natives' to become 'learning natives' should not be limited to a single national focus.

The shifting nature of digital literacy and impacting factors

Digital literacy can be described as a set of skills, but, because of the technological landscape in which we live, the practices described within any definitions of digital and media literacy clearly expand and shift over quite short periods of time. The time periods involved are likely to be quite short, as technological changes happen frequently, within periods of time that are no longer than about 18 months (see Passey, 1999; Becta, 2007). Fundamental changes in technology mean that details concerned with features of digital and media literacy are likely to shift; that shift might mean that some features become easier or redundant, while others are enhanced or arise anew. In general, digital and media literacy will cover an increasing range of practices, but at any one time, for any one purpose, individuals will be likely to select a subset of the entire range of all possible practices in order to carry out one or more specific activities. However, overall, there are a number of features that are likely to determine an individual's digital or media literacy. The key features depend on:

- Access to hardware (and while the hardware is becoming increasingly diverse, individual technologies are also becoming more specific in terms of their applications for use).
- Access to resources (which is becoming increasingly more convergent in some respects, as this feature often depends upon web access).
- Opportunities to use hardware and resources (and these will cover social settings as well as learning and professional settings).
- Existing skills and willingness to adapt to new needs (based on the sorts of priorities of need that an individual has, as well as any focal interests).
- Purposes for using hardware and resources (educationally, but importantly, also socially).
- Audience focus for uses of hardware and resources (increasingly made possible and accessible through applications concerned with online social networking).

Current levels of access to technologies

In a recent report from a study exploring uses of Web 2.0 technologies by young people 11 to 16 years of age, Luckin *et al.* (2008) concluded that:

- Access to computers and the internet at home was very high (98.4% of the total sample had access to a laptop, a desktop computer or to both, and 96.6% had access to the internet).
- Virtually all schools were found to have a few individuals who reported lack of access (although it was noted that only a minority had their own laptop or desktop computer, while for most the computer was a family resource). It was also reported that such shared access to a computer might help in achieving parental involvement in school activities.
- From the total sample of respondents, 90% used email or instant messaging out of school. By contrast to high levels of use outside schools, learners experienced rather little computer activity in school.

These results indicate that many young people have access to technologies outside school (and often this is shared access outside school, as well as inside school), and that they use these technologies more than they do inside school. This report is not alone in reporting those findings; levels of technology access and use by young people are generally recognised as being high, often associated with their having time to 'play with the devices', leading often to highly dextrous use of some facilities, so that young people are described as being 'digital natives' with regard to uses of technologies (see Prensky, 2007).

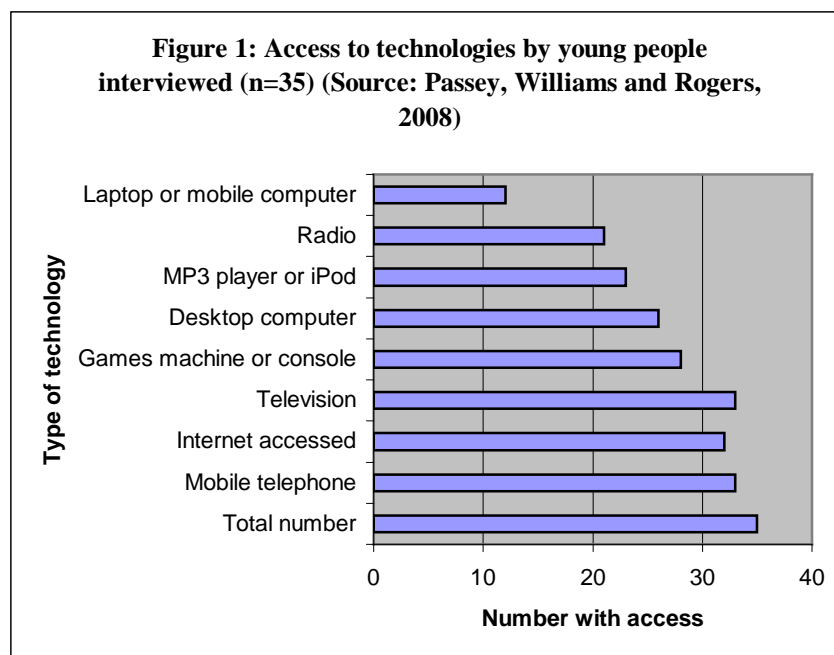
Current access levels at home and in school

In terms of considering access and uses of technologies inside and outside school, the report looking at uses of Web 2.0 technology by young people 11 to 16 years of age (Luckin *et al.*, 2008), said that:

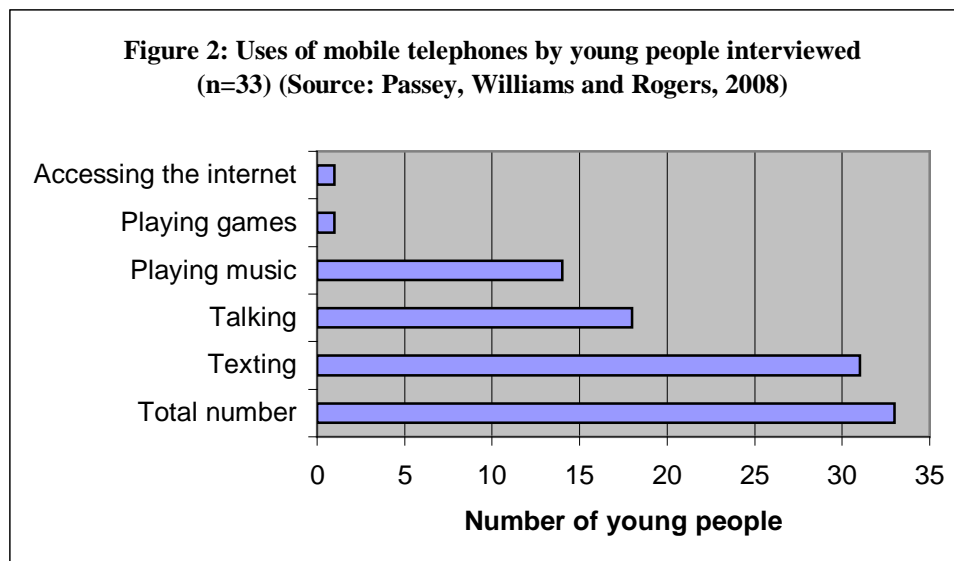
- Learners spent, on average, more time working on schoolwork on a computer outside school than they did at school (34% of all learners estimated that they spent only an hour each week using a computer at school).
- Collaborative activity was similarly higher outside school, as were file-sharing activities such as picture sharing, video sharing and music downloading.

The picture that is evoked, of high levels of use and access outside school, but more confined inside school, is not necessarily restricted to those groups of young people who might be expected to have such high levels of technology (associated perhaps with higher socio-economic population categories, or those in employment, for example). Young people who are not in education, employment or training (NEET) have been found in one study to have access to technologies that are generally (and perhaps surprisingly) high (reported recently by Passey, Williams and Rogers, 2008). Findings from this study showed that on the whole, technologies were used by this group of 16 to 18 year old young people for communication purposes more than for information purposes. Certain technologies tended to be used for more specific purposes; desktop and laptop computers were used more for purposes concerned with learning (perhaps because computers and laptops were seen as workplace or education tools rather than as personal tools).

Interviews conducted as a part of the study, with a range of young people who were NEET, mainly 16 to 18 years of age (although one was 20 years of age), provided evidence of the forms and levels of access and uses made of technologies. In total, 35 young people were interviewed (18 girls and 17 boys). From this sample, a surprisingly large number accessed the internet, and had access to a desktop, laptop or portable computer. It was also surprising to find that very few young people reported using desktop or laptop computers with others (friends or family), while they reported using televisions, games machines and mobile telephones commonly with others around them (friends or family). Relatively few young people accessed the internet with others. It was also surprising to find that few of the young people used computers and internet access for playing games. Indeed, computers and internet access were reported to be used more for aspects concerned with education and employment than they were for playing games. Levels of access to different technologies are shown in Figure 1.



It is clear from these findings that digital and media literacy are concerned often with using a very wide range of technologies for any one individual. Across the 35 young people interviewed, it is clear that many had access to perhaps 5 different technologies. The most commonly accessible technology was the mobile telephone; young people reported that they used these widely, wherever they were, when they were on their own or with friends or family. Different ways in which the mobile technology was used are shown in Figure 2.



These results indicate that the young people were involved to a far greater extent in texting, talking and playing music on mobile telephones than they were involved in activities that might be considered to relate to direct forms of 'learning'. A questionnaire survey run across all careers centres in one region provided more specific evidence about uses of technologies for purposes of direct learning. Questionnaire responses were gathered from, in total, 305 young people. The young people were asked which technologies they had, what they used them for, where, and who with. Their responses are shown in Table 1.

Technology	Have one	What it is used for							Where it is used			Who with	
		Music	Video	Texts	Talk	Email	Learning	Finding things	School, college, work	Home	Out	On my own	With friends, family
Mobile phone	279	213	153	256	262	22	19	59	99	227	247	211	207
Computer with internet	204	185	127	77	137	181	156	190	124	180	26	147	129
Laptop or palmtop	84	67	52	29	52	59	50	64	40	67	17	51	54
Games machine	201	74	60	6	15	4	25	14	7	140	20	123	125
Television	278	181	188	2	5	2	109	60	32	217	28	186	192
Radio	202	170	6	1	4	1	30	20	15	113	29	105	86
MP3 or iPod	196	187	67	5	3	3	15	7	58	115	135	135	86
Totals	1444	1077	653	376	478	272	404	414	375	1059	502	958	879

Table 1: Uses of technologies reported by young people who are NEET (n=305) (Source: Passey, Williams and Rogers, 2008)

Those items where there were about two-thirds or more responses are shaded in grey. It is clear from these responses that technologies are popular with these young people, and that many young people own or have access to more than one form of technology (indeed, on average, each young person has access to between four and five of these forms of technology). In order of decreasing popularity, the technologies owned or accessed by these young people are:

- Mobile telephones (mainly used for texting, talking, and music, both outside and at home, on their own and with friends).
- Television (mainly used for music, video, but also often for learning, at home, on their own or with friends).

- Computers with internet (mainly used for music, finding things, email and learning, at home, school, college or home, on their own or with friends).
- Games machines (used for music, at home, on their own and with friends).
- Radio (used for music, at home, on their own and with friends).
- MP3 or iPods (used for music, at home and out, on their own and with friends).
- Laptops or palmtops (used for music, finding things, video, email, talking and learning, at home, with friends and on their own).

The uses of these technologies, as reported by the young people, offer ideas about the elements that make up their digital literacies:

- Accessing, copying, manipulating and playing music on mobile telephones, computers with internet access, games machines, television, radio, mp3 players or iPods.
- Accessing, copying, manipulating and playing videos on mobile telephones, computers with internet access, games machines, television, mp3 players or iPods.
- Creating, reading and responding to texts on mobile telephones and computers with internet access.
- Talking via mobile telephones and computers with internet access.
- Creating, reading and responding to emails on mobile telephones and computers with internet access.
- Accessing and using learning resources on computers with internet access, the television and the radio.
- Finding things on mobile telephones, computers with internet access, games machines, television, radio, mp3 players or iPods.
- Sharing and exchanging ideas with friends and family members.
- Practising and developing uses at home, as well as in other locations.

A key question to ask, perhaps, is whether this range of digital literacies matches those that are needed to support young people in learning endeavours. If so, a second key question to ask is whether young people apply these digital literacies to learning situations. Following on from this, a third key question to ask is whether these digital literacies lead to any specific enhancements in learning, or whether they offer some affordances that cannot be provided in any other ways. What is clear from the list above is that the young people apply their digital literacy to uses of these technologies because they believe they offer real audience, real purpose and real value; how far are these beliefs held by these young people, in terms of learning as well as in terms of social endeavours?

Digital access related to attainment and achievement

The relationship between uses of technologies and enhanced attainment is becoming increasingly recognised and reported. Somekh *et al.* (2007), in a recent report on uses of technologies by pupils inside and outside school, concluded that:

- Students at all levels (across the 7 to 16 year age range) reported some use of home computing for their homework. Students 14 to 16 years of age, in particular, reported that they regularly used computers in their work at home.
- At the primary level (7 to 11 years of age), it was found that children were less well equipped than secondary students to take advantage of home-school links given their relatively poorer levels of home resources.
- As technology was embedded, schools' national test outcomes improved beyond expectations, although the impact of ICT on attainment levels was greater for primary schools than for secondary schools.

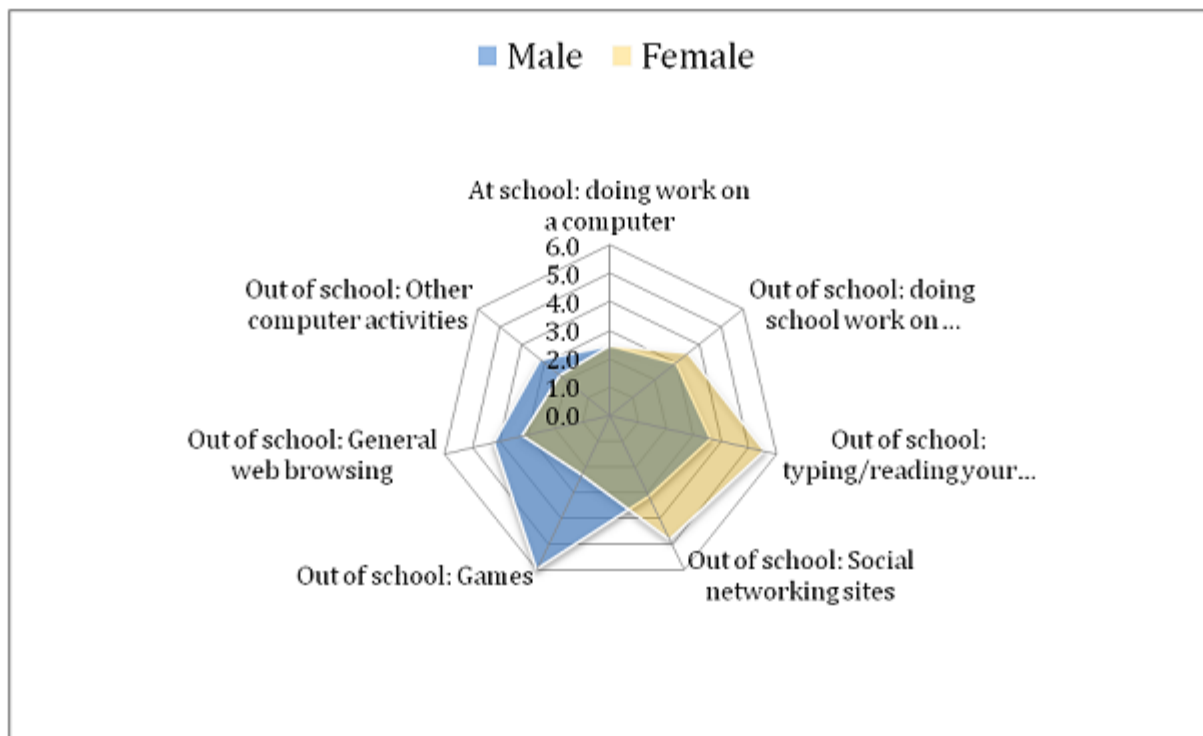
It is clear from these findings that digital access, literacy and attainment enhancement are likely to be linked in certain ways to age groupings. In other studies (Harrison *et al.*, 2002, for example), digital access, literacy and attainment enhancements were linked to subject focus as well as to age groupings.

These studies (and others) have identified enhancements in terms of subject attainment levels, while other studies have identified wider outcomes, in terms of achievements beyond subject attainment

enhancements. Luckin *et al.* (2008), reported that achievements could be categorised through a range of types of activity that could be identified - readers, gamers, file-sharers, communicators and newscasters (in terms of sharing experiences through social networking sites). The authors indicated that amongst their study participants, relatively few learners were: “engaging in more sophisticated Web 2.0 activities such as producing and publishing their own content for wider consumption”, and that: “In order to be motivated to publish content, learners must perceive that publication carries utility for the self or important others. In addition, learners may lack the technical knowledge and skills needed to publish content online”. These findings, in common with others indicated previously, highlight the fact that ‘sophisticated’ activities are often associated with learning affordances, but that young people either do not possess these abilities, or they do not exercise them.

Crook and Harrison (2008), in their study of Web 2.0 technologies, showed that digital literacies used and developed outside school could be rather different for different gender groups (shown in Figure 3). Their findings indicate that girls spend more time out of school typing, reading and on social networking sites, while boys spend more time out of school on general browsing and games. Differences such as these are clearly important when considering how to most appropriately develop digital literacy techniques and their applications.

Figure 3: Chart showing average time in hours spent each week by gender on selected computer-related activities* (Source: Crook and Harrison, 2008)



* All values except time spent in school using computer for school work are significantly different between genders.

Normative sample only.

The report by Luckin *et al.* (2008), indicated the important role of schools in making a difference to the abilities or application of young people with respect to digital literacies and learning: “While the data shows that learners have the potential to be critical consumers of information on the internet, they are selective in applying that criticality. It emerged from participant reports in focus groups that copying and pasting information from the internet was extremely common at the schools in this sample. Examples of more sophisticated learning activities were found when the school had engaged learners appropriately.” It is clear, from the range of evidence offered here, that ‘digital natives’ are not ‘learning natives’; if the development of ‘learning natives’ is an important concept (and from the perspective of encouraging independent learning, or from the perspective of supporting learning in

settings beyond a school building, it could be argued that it is), then there is a need to consider those elements of digital and media literacy that should be included in learner development opportunities, to ensure that important aspects of learning can be achieved and undertaken.

What should digital literacy seek to support in terms of learning?

An alternative approach (or direction), is to ask, if digital and media literacy are to be used by young people to support learning, then exactly what forms or aspects of learning should the digital or media literacies be focused on? The educational research literature highlights the critical importance of a number of certain aspects of learning, all of which should be accommodated appropriately when students are involved in learning activities, to allow learners to become increasingly expert in their learning. Key aspects include:

- Making learning real or 'authentic' (see Bonnett and McFarlane, 1997).
- Allowing or supporting discussion (see Vygotsky, 1962; Pask, 1975; Mercer and Littleton, 2007).
- Using technologies to support focal aspects of cognition, such as analysis, synthesis, evaluation, creativity, concept formation (see Passey and Rogers, 2004).
- A focus on the transfer of learning (see Bransford *et al.*, 2000).
- Covering multimodal aspects of literacy (see Kress, 2005).
- Using media creatively to express and communicate ideas, information and opinions (see the European Charter for Media Literacy, 2008).

If these are the forms of learning that should be supported (no matter which media are involved), then it is important to identify whether these forms of learning can be supported by aspects of digital and media literacy, and which learners gain from these (and under what circumstances). It is not unreasonable to believe that different forms of technologies, different learners, and different activities will lead to different and specific outcomes. Evaluation of digital and media literacy activities, outcomes and affordances, therefore, is likely to present a range of challenges, and will require a focus that will allow specific impacts to be identified. Two exemplars of activities that involve young people in using digital literacy capabilities are selected here to illustrate both the need to evaluate each selected case in its own right, and to illustrate that each activity can afford recognisable learning impacts.

Using an online discussion and mentoring system

Many students now have access to virtual learning environments (VLEs). Some of these systems provide access to online discussion and mentoring facilities. One such system, which has been established in practice for some years, has provided access for a wide range of learners across two local authorities (LAs) in England. In total, 22,000 learners aged 14 to 19 years were registered to use the Virtual Workspace online mentoring system across the two LAs in 2006. This system provided a mentoring service, which included: live communication with human mentors from 8am to 8pm on weekdays; a bank of over 4,500 interactive learning materials supporting the 14-19 curriculum; a range of communication channels, including messaging, discussion forums and chat rooms; online assignment management and storage of work and interest materials; Online Communities, encouraging collaboration between learners and teachers across schools and colleges; and an incentive scheme for learners, offering real rewards.

A study was commissioned to look at the uses made of the system and its outcomes (reported in Passey, 2007). One of the early areas of interest, which arose from interviews with teachers, was the perceived positive impact of discussion and mentoring facilities on reticent or quiet learners in classrooms (termed 'shy' learners for the purposes of the study). Teachers reported often that such young people appeared to be more involved in online discussions, and appeared to be gaining from their involvement. To identify whether this might be the case for these learners, the study involved students completing an online questionnaire. The questionnaire asked learners to indicate whether they would regard themselves as being 'shy in terms of discussing ideas in class'. Table 2 shows the comparative responses of all boys, 'shy' boys, all girls and 'shy' girls. When self-reported 'shy' boys' and 'shy' girls' responses were considered, most 'shy' boys and girls (more than 60%) reported that they would like to see more use of the system, they felt the system was safe and secure, they liked the points system, the system had helped them with their school work, had allowed them to share ideas

with other learners, they thought discussing points with other learners allowed them to learn better, the system had helped them with coursework or assignments, and had allowed them to maintain contact with other learners to support their work.

Question	Yes % boys	Yes % shy boys	Yes % girls	Yes % shy girls
1. Have you been given sufficient training and encouragement to use the system?	52	53	44	44
2. Do most of the teachers in your school encourage you to use Virtual Workspace?	36	39	38	40
3. Do teachers suggest you use other online systems, such as a school intranet?	38	39	46	47
4. Has Virtual Workspace helped you with your school work?	62	67	56	58
5. Do you use the Communities area most?	30	32	25	28
6. Has Virtual Workspace helped with revision?	34	40	31	33
7. Has it helped with discussion of work outside the classroom?	42	56	36	38
8. Have you used it to keep contact or do work when you have been absent from school?	43	49	46	49
9. Has it allowed you to maintain contact with other students to support your work?	59	64	62	63
10. Has it allowed you to share ideas with other students?	63	67	65	66
11. Do you think discussing points with other students allows you to learn better?	63	67	64	67
12. Has it allowed you to express your ideas when you might not do this in class?	43	56	44	53
13. Would you say you are a shy person in terms of discussing your ideas in class?	34	100	44	100
14. Have you been more involved in learning than you might otherwise have been?	29	45	25	33
15. Has it helped you to make more contact with your teacher(s)?	34	36	30	32
16. Has it helped you to understand your teacher(s) more?	22	31	17	23
17. Has the polling system helped you with certain topics?	32	37	28	32
18. Has Virtual Workspace helped with coursework or assignments?	57	66	57	61
19. Has it helped you to access lesson resources outside the classroom?	58	63	56	60
20. Do you feel the system is safe and secure?	79	83	82	83
21. Have you contacted the online mentors?	38	44	32	32
22. Have mentors helped you personally?	27	36	25	24
23. Would you like to see more use of Virtual Workspace?	76	84	77	82
24. Do you like the points system?	75	81	79	83

Table 2: A comparison of percentage responses by all boys (n=533), shy boys (n=179), all girls (n=953) and shy girls (n=412) (Source: Passey, 2007)

By comparing the responses of 'shy' learners to all learners in that group, those cases where there was at least a difference of 8% were highlighted. For these instances, a Chi-squared test of goodness of fit was used to identify any statistically significant difference between the two sets. By comparing the responses of 'shy' boys with all boys, the percentage of responses from 'shy' boys was higher (by at least a difference of 8%) in their reports about: being more involved in learning than might have been the case otherwise (16% difference, $\chi^2= 22.96$, $p<0.005$); discussion of work outside the classroom (14% difference, $\chi^2= 12.98$, $p<0.005$); allowing ideas to be expressed when this might not happen in class (13% difference, $\chi^2= 13.16$, $p<0.005$); helping to understand teachers more (9% difference, $\chi^2= 8.99$, $p<0.005$); helping with coursework or assignments (9% difference, $\chi^2= 6.27$, $p<0.05$); mentors helping personally (9% difference, $\chi^2= 6.36$, $p<0.05$); and wanting to see more use of the system (8%

difference, $\chi^2= 5.97$, $p<0.05$). By comparing the responses of ‘shy’ girls with all girls, the percentage of responses from ‘shy’ girls was higher (by at least a difference of 8%) in their reports about: allowing ideas to be expressed when this might not happen in class (9% difference, $\chi^2= 13.64$, $p<0.005$); and being more involved in learning than might have been the case otherwise (8% difference, $\chi^2= 11.54$, $p<0.005$). In all the instances highlighted, statistically significant differences were shown between the ‘shy’ group and the group of all learners (and it should be noted that in all cases where the statistics are quoted, $df=1$).

The system, according to learner feedback (and supported by interview evidence from a number of teachers), was being used to support the involvement and learning needs of ‘shy’ learners. There appeared to be a particular emphasis of use by ‘shy’ boys (even though there were fewer of these that self-reported as being ‘shy’), but the potential impacts on both groups were potentially important. It should be noted here that ‘shy’ was likely to encompass at least three different groups of learners: those who were naturally reticent in terms of limiting the giving of their ideas in classrooms; those who found it difficult for emotional or social reasons to engage in a classroom learning environment; and those who did not want to be seen by others as being engaged or interested in the topic or lesson. In all these cases, online discussion and mentoring was providing opportunities for social involvement that would be unlikely to occur otherwise.

Creating news stories for broadcast

The second example focuses on a quite different technology. In this case, young people needed to create news stories. This example comes from a BBC News project, which involved a large number of schools across the UK. The BBC News has run this School Report project for the last two years. The project has enabled young people of secondary school age to develop practice in, to identify, and to create news reports in a form that could be broadcast. As the BBC News School Report web-site states: “BBC News School Report gives 12 and 13-year-olds from UK schools the chance to make their own video, audio or text-based news at school and to broadcast it for real. While the project is devised for this age group, students aged 11 to 14 may also take part. Using lesson plans and materials from this website, and with support from BBC staff, teachers help students develop their journalistic skills and become School Reporters” (BBC News, School Report, 2008, www.bbc.co.uk/schoolreport).

Outcomes arising from those schools and city learning centres (CLCs) involved in the north-west of England (reported in Passey, 2008), indicated the very wide range of news reports that students created. The news reports were categorised broadly according to topic, and the numbers of news stories in each category is shown in Table 3.

Topic	Frequency
Safety and comfort (such as bullying, crime, racism)	22
Education and school issues (such as closures or buildings)	20
Health (including healthy eating)	20
Sports (including school sports events)	18
Entertainment (including entertainment in schools and exhibitions)	16
Current news stories about individuals (such as Sophie Lancaster)	15
Citizenship, finance, current issues and concerns (such as the Budget, climate change or poverty)	13
Science and technology	7
Weather	7
International issues (such as riots)	6
Forms of communication (such as mobile telephones)	4
Shops and shopping	4
Local recreation and living	3
Traffic and transport	3
What's on	3
Feature programmes (such as Question Time)	1
Historic disasters	1
Languages	1

Table 3: Numbers of school reports categorised by broad topics (Source: Passey, 2008)

There were seven topics that were selected by students more often than others (these are shaded in grey in Table 3). Other topics not coloured were involved at rather lower levels. From this topic list, taking those categories where reports were commonly involved, students were clearly concerned about a range of important societal and social issues. An important point to consider in terms of these topic areas is the provision of any opportunity that might be offered in schools (or indeed, outside schools), for students to identify and select these topics, and to offer their ideas, generating and providing levels of ‘student voice’ that are accessible to a wider audience. It seems highly likely that students would not, using other forms of activity, be able to provide their ideas, views and perspectives on this range of highly relevant and important topics in the same way, especially in terms of audience (real audience). There is a clear link here between topics selected and issues raised within the ‘Every Child Matters’ document (2003), and the Youth Media Education recommendations addressed to the United Nations Educational Scientific and Cultural Organization (UNESCO) in Seville (2002), which stated that Media Education should be regarded as a part of: “the basic entitlement of every citizen, in every country in the world, to freedom of expression”, ensuring that young people can: “Select appropriate media for communicating youngsters’ own messages or stories and for reaching their intended audience”.

Teachers felt that the project led to significant outcomes for their students. Even though some teachers responding through online questionnaires were critical of some organisational aspects of the project, they all, without exception, were able to identify crucial educational outcomes for their students. These outcomes are categorised and shown in Table 4.

Educational outcome reported	Frequency
Working well with others (outside their social circle)	11
Confidence	6
Multimedia skills	6
More enlightened about the news and journalism	6
Well motivated or interested	5
Reading	4
Working to deadlines	4
Gathering evidence to explore an open topic	4
Interviewing techniques	4
Improved speaking and listening skills	4
Independent learning	3
Writing without bias	3
Script writing	3
Communication skills	2
Organisational and planning skills	2
Education outside the classroom	2
Writing for different audiences	2
Interest in journalism as a career	2
Ownership of task	1
Topic knowledge	1
Watched news more	1
Maturity	1
Presenting skills	1

Table 4: Educational outcomes reported by teachers (Source: Passey, 2008)

Many teachers found it difficult to identify specific outcomes (as they felt individual students had gained in different ways), although a number indicated that very many focal learning outcomes (in terms of those identified as important by the educational research literature), had been attained as a consequence of student involvement. For example, one teacher said: “Most of the outcomes stated on the pdf documents linking the project to curriculum areas [accessible from the web-site] were met. In addition there have been many notable achievements and in general I, and other people have noticed, improved confidence, self-esteem, maturity, team working skills, improved speaking and listening

skills, enquiry and questioning skills and lots more. Every child taking part has gained something very individual from this project and it has enhanced both their school work and personal skills dramatically”.

There were some specific areas of skills that teachers noted as being supported by this project. One teacher pointed to the enhancement of confidence, saying: “It definitely boosts the confidence of our shy students and made our not so shy students even bolder!”. The impact of the ‘real’ situation was highlighted by one teacher: “All can be gained in other ways but the end result of this is much more real to them”. Another teacher indicated some of the very real attributes that can be gained from this ‘real’ situation that may not arise easily in school environments: “Too often at school deadlines are flexible and excuses are accepted, there was no room for this at News Day. Working with pupils from other schools and other year groups kept the pupils on their toes. When I evaluated the day with them their first reactions were focused on the people in their groups. Most of them had very positive experiences and those who found it more difficult to work with their group learnt a lot about the true meaning of working as a team and persevering with people you don’t naturally get on with”.

Students were asked about the main challenges they felt they faced when undertaking this project. It was clear from their responses in interviews (shown in Table 5), that the meeting of deadlines and finding out correct details about a story were two key areas felt to be particularly challenging (but in a positive, and not in a negative, way).

Main challenges	Frequency
Meeting deadlines	21
Finding out correct details on the day	17
Lot to do to get right	9
Writing a story to make it interesting	7
Putting things together in time	4
Being on camera	3
Trying to accommodate opinion	3
Technical problems	3
Taking pictures	2

Table 5: Student responses about main challenges they faced (Source: Passey, 2008)

When students were asked about what they felt they had gained most from the project, their responses (shown in Table 6) related well to the gains reported by teachers and CLC managers. The main gains reported by students were the acquisition of new skills (such as technical skills), working better in teams and listening more to each other, and gains in confidence (including confidence gains when presenting in front of a camera).

Main gains	Frequency
New skills (including technical skills)	22
Team working and listening	13
Confidence (generally as well as in front of the camera)	12
More involved in news and what it involves	8
How to be a journalist or reporter	7
Not an easy process, especially finding information	5
Meeting deadlines and being organised better	5
Ideas for the future	5
How to put a story together	1
Meeting new people	1

Table 6: Student responses about main gains arising (Source: Passey, 2008)

Teachers indicated in a number of cases that students were becoming more ‘news aware’, were watching the news more, and gaining interest in some cases in taking up a career in media or journalism. This picture was supported by responses from students (shown in Table 7), and indeed, in 18 cases out of the 35, students indicated that they would like to work in the future in the media in some way.

Ideas for the future	Frequency
Work/course in the media	5
Like to do newscasting	4
Become a journalist/do a journalist course	4
Like English more, see the relevance more	4
Become a journalist/photographer	3
Work together more	3
Do the school newspaper in future	1
Think about becoming a reporter	1
Become a scriptwriter	1
Changed views on the news	1
Not sure	8

Table 7: Student responses about their long-term goals (Source: Passey, 2008)

Findings from this study indicate that a wide range of affordances, outcomes and impacts can arise from activities that require young people to use digital and media literacy capabilities. However, it also points to the fact that individual young people are likely to be gaining in specific ways. The fact that activities involving digital and media literacy can lead to positive learning outcomes is clear; exactly which learning outcomes arise for which groups of learners is less clear, yet this type of evidence is clearly required if more specific and effective support for different groups of learners is to be set up.

Conclusions

It is clear that ranges of technologies accessible to young people, and that the associated digital literacy required to use these technologies for social as well as for learning purposes, are shifting dramatically and quickly. It is also clear that key learning needs are likely to be met by appropriate use of activities that involve ranges of digital literacy skills. While uses of technologies by young people outside school, and for social purposes, are more advanced than uses of technologies for educational uses or inside school, there remains the question of how the fundamentally important affordances can be effectively supported in schools and through appropriate school activities. Some activities involving uses of digital resources (the two exemplars described in this chapter), have been shown to provide specific learning affordances for individuals, but that a wide range of many affordances are likely to arise as a consequence of the activities. It is clear that a greater research focus is needed to identify useful and effective exemplars of activities that involve the uses of digital and media literacy skills, and that the affordances arising from these specific activities need to be carefully and specifically identified. Once a range of useful activities have been identified and are accessible, and when specific affordances have been identified, then more focused teacher support could be put in place to integrate practice of a range of activities where affordances are already recognised. In parallel, and taking the context outside schools inside consideration, these findings should also be generated in ways that will allow a greater focus on appropriate student and parent support to enhance educational as well as social outcomes.

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