

# GENERATION 2000

## THE INTERNET AND DIGITAL MEDIA HABITS AND DIGITAL LITERACY OF YEAR 9 PUPILS (13 AND 14 YEAR OLDS) IN WALES

A WISE KIDS Project  
December 2014



Co-Funded by The Children's Commissioner for Wales, Logicalis and S4C



## CONTENTS

.....	1
Contents .....	2
Citation .....	4
Common Terminology and Abbreviations.....	4
Executive Summary - Key Findings .....	6
Internet Use .....	6
Personal and Social Experiences .....	6
Online Safety, Resilience and Privacy .....	7
Parental Mediation .....	8
School and Learning.....	9
Digital Skills, Literacies and Barriers .....	11
Welsh Language Provision .....	11
Conclusions and Recommendations.....	12
Schools, Learning and Technology .....	12
Digital Inspiration Gap .....	13
Responsibility and Digital Citizenship .....	13
Online Safety, Resilience and Digital Citizenship.....	13
Online Privacy .....	14
Parents and Carers.....	14
Welsh Language Provision .....	14
Computing.....	15
Further Research.....	15
1 Introduction.....	16
1.1 Wales: Our research Project.....	17
1.2 General Information .....	17
2 Internet Use – Where, How and How often .....	20
2.1 Location of Internet Use .....	20
2.2 Devices Use .....	21
3 Personal and Social Experiences.....	23
3.1 Time spent On different activities on an Average School day.....	23
3.2 Personal and Peer-Based Activities.....	24
3.3 Schools With Different Levels of free school meals (FSM).....	25
3.4 English and Bilingual/Welsh medium Schools .....	26
3.5 Urban and Rural Schools.....	27
3.6 Smartphone and Tablet Users .....	27
3.7 Social Communication and Entertainment .....	29
3.7.1 Perception of Online Identities .....	30
3.7.2 Belonging .....	31
3.7.3 Creative Sharing Practices .....	31
3.7.4 Gaming .....	32
3.7.5 Celebrities and YouTubers.....	33

3.7.6 Video chat, Email Other communication .....	33
3.7.7 Downloading and Appropriating Music and other Media .....	34
3.7.8 Some Other Practices .....	34
<b>4 Online Safety, Resilience and Privacy .....</b>	<b>35</b>
4.1 Negative and/or Upsetting Online Experiences by Gender .....	35
4.2 Negative and/or Upsetting Online Experiences by Smartphone/Tablet use .....	36
4.3 Undertaking Risky Experiences By Gender .....	37
4.4 Undertaking Risky Experiences by Monthly and Less than Monthly Use of Smartphones/ Tablets .....	38
4.5 Knowledge of legal issues .....	38
4.6 Online Safety and Resilience .....	39
4.6.1 Online Strategies for safety .....	39
4.6.2 Responses to Really Upsetting COntent .....	41
4.6.3 Speaking out .....	42
4.7 Privacy Online .....	42
<b>5 Parental Mediation .....</b>	<b>44</b>
5.1 General Parental Internet Mediation in the Home .....	44
5.2 Parental Mediation Involving Social Media and Messaging .....	45
5.3 Privacy From Parents .....	46
5.4 Parental Technical Mediation .....	47
5.5 Parental Trust .....	47
5.6 Parental Perception of Children’s Activities .....	48
5.7 Parental Digital Awareness and Competency .....	48
5.8 Parental Involvement .....	49
<b>6 School and Learning .....</b>	<b>50</b>
6.1 Internet and Technology Provision, Use and Rules in School .....	50
6.2 Lessons related to Internet Use .....	53
6.3 Internet and Technology use in Homework and Revision .....	54
6.3.1 Distraction and Self-Regulation .....	55
6.4 Informal learning and Using the Internet for School Work .....	55
6.5 Online Safety and Critical Thinking in Lessons .....	56
6.6 BYOD and Technology provision that children would like .....	58
6.7 Interaction with teachers outside of school .....	59
<b>7 Digital Skills, Literacies and Barriers .....</b>	<b>61</b>
7.1 Digital Literacy .....	62
7.2 Self-efficacy/Confidence .....	64
7.3 Appropriating the technology .....	65
7.4 Barriers .....	66
<b>8 Welsh Language Provision .....</b>	<b>68</b>
<b>9 References .....</b>	<b>69</b>
<b>10 Appendices .....</b>	<b>71</b>
Appendix A: Methodology for Qualitative and Quantitative Research .....	71
Appendix B: Research Team .....	73

## Acknowledgements

We are greatly indebted to our research partners who have provided the financial support, which we have matched in kind, to make this research possible. They are the Children's Commissioner for Wales, Logicalis and S4C. Without their support, this work would not have been possible.

We are also deeply grateful to the staff and pupils from schools across Wales who have participated in this research. In the interest of maintaining their privacy, we have decided not to list their names. You know who you are and we thank you greatly for your support and involvement!

Finally, in carrying out this research programme, we have learnt from others. Some of the questions in our online questionnaire have been adapted from other questionnaires: the EU KIDS Go Online questionnaire, Net Children Go Mobile questionnaire, Common Sense Media Student questionnaire.

## CITATION

**Please cite as: Sangeet Bhullar, Ellen Helsper, Gareth Loudon, Richard Linnington, Serena Davies and Huw Davies. Generation 2000: The Internet and Digital Media Habits of Year 9 Pupils (13 and 14 year olds) in Wales. A WISE KIDS Project, co-funded by the Children's Commissioner for Wales, Logicalis and S4C.**

## COMMON TERMINOLOGY AND ABBREVIATIONS

**BYOD:** 'Bring Your Own Device' in schools refers to the practice of allowing pupils to bring in and use their own smartphones, computers or tablets for personal and school use.

**BBM:** Blackberry Messenger Service which allows group or individual messaging with attachments. Requires a Blackberry phone or Blackberry app to be installed on a smartphone or mobile device.

**Cyberbullying:** 'willful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices' (Hinduja & Patchin, 2009).

**Digital Competency:** ability to use the Internet and digital technologies fully, effectively and safely.

**Digital Literacy:** refers to the knowledge, skills and understanding to use online services effective and safely, and to understand the social, cultural, and economic and other implications of being an online citizen.

**Digital Citizenship:** refers to the values, behaviours and digital literacy needed for effective, creative, responsible and safe online participation.

**Info-critical literacies:** literacies related to being able to evaluate sources of information

**FSM:** Free School Meals

**Facebook Page:** A public Facebook profile meant for businesses, brands, celebrities, causes, and other organisations. Unlike Facebook personal profiles, people have to "like" a page as opposed to add them as a "friend" to get updates.

**Informal learning:** learning outside of school which has no set objective in terms of learning outcomes.

**Platforms:** refer to websites, apps, instant messaging services, gaming and social networking.

**Sexting:** refers to the use of digital technologies and devices to create, send or share explicit videos or photographs of someone under the age of 18.

**Smartphone:** typically a touch screen phone on which you can browse the Internet, download and access apps, emails, play audio and videos.

**SNS:** Social Networking Service

**Social Capital:** 'the links, shared values and understandings in society that enable individuals and groups to trust each other and so work together' (source: OECD Insights: Human Capital - <http://www.oecd.org/insights/37966934.pdf>)

**Social Messaging Services:** These refer to group and individual messaging services that generally work over the Internet, which may not require a mobile phone number. Examples of services are Kik, iMessenger, BBM, Whatsapp, Viber.

**Social Network Platforms** - these refer to services like Facebook, Instagram, Twitter, Tumblr, Snapchat etc.

**PSE:** Personal and Social Education.

**VLE:** Virtual Learning Environment (VLEs).

**Wikipedia:** the largest online 'encyclopaedia' of information which has been created by Internet users themselves, and which can be edited by any Internet user.

**YouTuber:** someone who has a dedicated YouTube channel, which has a following or fan base.

**Copyright WISE KIDS 2014. All Rights Reserved.**

## EXECUTIVE SUMMARY - KEY FINDINGS

This report presents the findings of a research project undertaken by ourselves, WISE KIDS, (and co-funded by the Children's Commissioner for Wales, S4C and Logicalis) - on the Internet and Digital Media Habits and Digital Literacy of Year 9 Pupils in Wales.

**In particular, the project aimed to provide insights on:**

- How Year 9 pupils (13 and 14 year olds) in Wales are using the Internet and digital technologies in a social and educational context; their experiences, perceptions, motivations and behaviours.
- How digitally literate they are: how able they are in using the Internet and digital technologies critically, positively and safely, for socialising and for education.
- How knowledgeable and skilled they are in keeping safe online, and the practices they adopt.
- Their perception of the provision and use of the Internet and digital technologies in school; their perception of online safety lessons.
- Their perception of parental mediation and support related to their use of the Internet and digital technologies.
- The barriers that stop them from participating fully online.
- How they would like to be engaged to become empowered digital citizens.

This report provides evidence-based recommendations to education policy makers, educators and others interested in improving young people's education, digital literacy and digital citizenship in Wales.

The research project had two parts: a qualitative study followed by a quantitative study. The qualitative study involved group interviews with 34 Year 9 pupils from four schools across Wales (in urban, sub-urban and rural settings, and one bilingual school in a semi-rural setting). This was followed by semi-structured one-to-one interviews with 24 Year 9 pupils in their homes. The quantitative study involved 2081 pupils from 24 schools across Wales (English, Bilingual and Welsh medium schools) completing an in-depth, online questionnaire, coordinated by their school teachers, in school time.

We chose Year 9 pupils for our study as we felt 13 and 14 year olds represent a transitional age group. As

children become teens, they naturally seek more privacy and autonomy. For these reasons, we also felt this age group would provide us with a useful benchmark of answers to the research questions above.

**Miscellaneous Notes:** In our research, we use the varying percentages of pupils in a school receiving free school meals (FSM) – as a proxy for varying socio-economic status. The term parent is used to refer to parent/carer.

Our key findings are summarised below.

### KEY FINDINGS

#### INTERNET USE

Access to mobile devices like smartphones, tablets, and affordable data plans/Wi-Fi mean that the majority of children have almost 'anytime, anywhere' access to the Internet: in their homes and when they are out and about. We found:

- **Home is still the main place of daily Internet access for children** with 78% saying they use it in their bedroom, and 60%, elsewhere in their homes.
- 70% report using the Internet whilst out and about, at least once a week, and 21% access it daily in school.
- **The main devices children use to go online are the smartphone, tablet and game console.** However, 20% of children say they have never used a smartphone, or use it less than once a week.
- Desktop use is lower than laptop use and tablet use.
- When comparing children from schools with different levels of Free School Meals (FSM), there is little difference in the numbers of children using particular devices daily, suggesting **no disadvantage in their use of devices.**
- There is little difference between boys' and girls' daily use of most devices to access the Internet - **the exception is game consoles which are used by 50% of boys daily and only 13% of girls.**

#### PERSONAL AND SOCIAL EXPERIENCES

The Internet and digital technologies are changing the personal and social experiences that children have, providing ubiquitous connection to peers, content, services and communities. We found:

- Social network platforms and social messaging services created important 'common virtual spaces' for communication, self-expression, getting news, friendship, 'being part of the crowd', belonging, and connecting with celebrities.
- The most popular **daily** activities for both sexes are **communication and entertainment**, mediated through social platforms.
- **Reported daily use of the Internet in school work is still relatively low at 17%.**
- Over a month, more children report using the Internet for school work (97%) and informal learning.
- **There was rich adoption of social network and social messaging services.** Facebook is still the main social networking service (SNS) for this age group (overall at 83%), but newer services like video chat (73%), Instagram (63%), Snapchat (68%) and Twitter (50%) have also been adopted, with more girls than boys using these. However, some children also left or did not join platforms they perceived negatively.
- Some platforms are seen as more private and considered to be their own personal space e.g. Instagram, whilst others like Facebook appear to be more of a friends and family space (though this was not unanimously the case).
- **Boys appear to socialise more through online gaming, whilst girls tend to socialise more through use of social network services and social messaging apps.**
- 52% of boys played online games daily, compared to 13% of girls. Two thirds of children do not game daily.
- 77% of children also report that they are still consuming media in traditional ways – spending at least one hour daily watching TV, movies, or DVDs (not on the Internet). Some do seem to be undertaking some activities intensively, spending more than 4 hours daily on TV, movies and DVDs, playing video games on their own or with others.
- Children undertake a range of creative and social activities like creating and sharing videos. **However, 25% of children say they have NOT created or shared videos on the social platforms we listed.**
- **Daily smartphones and tablet users are making more use of the Internet, and taking up more activities daily.** As activities and skills are linked, we can infer that **lower use of devices like smartphones could lead to a different sort of**

**skills divide, one which leaves non-users less able to exploit opportunities online.**

- Even though many children use tablets and smartphones, **relatively few appear to be exploiting the educational apps and opportunities these devices allow. Only 19% of children who use a smartphone or tablet daily, use the Internet for school work.**

When comparing **daily online activities** by the school language medium, urban/rural location and FSM, we found:

- 10% more children from schools with higher levels of FSM (compared to children from schools with lower FSM) use home game consoles daily.
- Slightly more children from schools with higher levels of FSM (compared to children from schools with lower FSM) undertake all activities **except 'use the Internet for school work'**. This suggests that **they are not being disadvantaged in terms of access to social and entertainment activities.**
- **Children from English medium schools are more likely to undertake social networking and gaming activities, than children from Bilingual or Welsh-medium schools.**
- Children from urban schools are slightly more likely to undertake all activities than children from rural schools.

## ONLINE SAFETY, RESILIENCE AND PRIVACY

A key component of digital citizenship is being able to manage one's safety and privacy online. We found:

- **Children are encountering a number of negative and/or upsetting experiences across a range of platforms and online spaces but had strategies in place to manage these.**
- 45% of children have 'seen upsetting content' and 42% have 'received rude and upsetting messages', with more girls than boys reporting this.
- 47% have had a virus.
- Children who use smartphones/tablets regularly **are more likely to report negative/ upsetting online experiences** than infrequent users. This might be because they undertake a greater range of activities, which is linked to a greater likelihood of encountering negative or upsetting content. **Sometimes however, the newer messaging apps themselves may be to blame. We found that children may have different perceptions of the intention or context of messages shared on**

**certain platforms, so misunderstandings occur more easily.**

When exploring risky activities, (like for example, 'looking at content that their parents wouldn't want them to online' and 'communicating with people they don't know'), we found:

- Children undertake a range of activities that adults might class as 'risky'.
- **Regular users of smartphone/tablet are more likely to undertake risky activities than infrequent users.**
- More boys than girls 'look at content that their parents wouldn't want them to online' and 'play video games rated 18'.
- A quarter of children have said something nasty to someone online.

When exploring children's strategies for keeping safe online, we found:

- **More than 70% of children had at least four social proactive strategies to manage their safety**, like using privacy settings, blocking, and practising self-censorship, taking screen shots as evidence, or sharing with friends for advice. **As resilience is related to having a number of reliable coping strategies, we can infer that children are fairly resilient.**
- More than half the children report using functional proactive strategies like installing anti-virus programmes/ apps (more boys than girls), and at least a quarter of them have made an online report about something they do not like (similar numbers of boys and girls).

When exploring how children responded to receiving really upsetting messages online, we found:

- 66% of children report they would 'block the sender'.
- **More girls than boys will tell their parents (61% vs 48%) or their friends (55% vs 39%).**
- **45% say they will 'report it to the service provider'.**
- 36% of children say they will challenge mean online comments, with more boys than girls reporting this.
- At least a quarter of children also said they would employ passive strategies like leaving the website or stop using the service/ game. **This act of 'taking time out' may be a protective and positive strategy. Much depends on the actual**

**situations as well as how children view these strategies themselves.**

When exploring children's online privacy practices, we found:

- Children valued their privacy, making choices about what to disclose and to whom.
- 71% reported using privacy settings; however only 43% of children said their updates on SNS were totally private. **Using privacy settings is not the same as being completely private online.**
- Children showed inconsistencies in their privacy practices, **raising the question of just how much they understand about managing their online privacy.** They did not appear to have a deep understanding of how online search worked, or always understand the multiple and often nuanced features of online platforms.

We also found that at least 30% of children were uncertain if certain online actions were prosecutable. 68% were aware that online bullying was prosecutable, suggesting the efficacy of many anti-bullying programmes.

## PARENTAL MEDIATION

Parents play a key role in supporting and guiding their children's Internet use.

- Children say their parents have mixed mediation strategies which appear to depend on factors like the parent-child relationship dynamic, perceived vulnerability of the child and parents' own digital competency.
- **At least 50% of children report that their parents have spoken to them and provided support and advice to help them use the Internet safely.**
- Other mediation strategies include being friends with the child on SNS; keeping their passwords; setting time restrictions and restricting them from using certain social platforms.
- 38% of children report their parents restrict their time online.
- **71% of children report being satisfied with their parent's level of involvement in their Internet use.**
- Whilst children still turn to their parents for support and homework help – **they didn't want their parents to be too controlling or too involved in their Internet use.**

- More girls than boys report general Internet related parental mediation. This **could suggest that parents assume that girls face more online risk than boys.**
- Two thirds of children who reported that their parents provided limited mediation said it was **because their parents trusted them.**
- 9% of children who reported that their parents provided limited mediation, **give the reason 'because they did not know how to use the technology'.**
- 52% of children who use Facebook report their parents check their use, whereas less than 30% of children who use newer platforms like Kik, Snapchat, Twitter and Instagram, report that their parents check their use.
- **More than 60% of children who use newer platforms (apart from Facebook) say their parents are aware they use these platforms, but do not monitor them.** This could be attributed to parental trust or a lack of awareness of the social networking features of the platforms or how similar they are to platforms like Facebook.
- Approximately 10% of children report that their parents do not know they use social platforms like Snapchat, Twitter, Instagram and Kik.
- **Many children feel their parents are lagging behind them in their awareness of some of these social platforms.**
- Most children think their parents would approve of most of their posts and Internet use. 16% think their parents may have mixed views, **suggesting that these children may be undertaking activities that could be embarrassing or risky.**
- **3% of children thought their parents would not approve of most or all of their interactions.**
- Children had mixed views about wanting privacy from parents. They expressed a desire for their own space, but did not always know how best to achieve this, against parental concerns. **Children highlighted a fear that their parents might misunderstand theirs or their peers' language, updates, or arguments online.**
- Only 43% of children think their school has good technology like fast computers/ tablets for lessons.
- 23% of children report having Wi-Fi that is useable in school.
- Several pupils expressed frustration with the poor overall provision of technology in schools. **This suggests that there is a gap between what children experience outside of school, and what schools provide.**
- 44% say they are allowed to bring in their own devices into school; **however only 19% say that they are allowed to use their own devices in lessons.**
- 59% of children report that their teachers know how to make lessons interesting using technology.
- 21% of children say they access the Internet daily in school.

When comparing findings across children from different schools by school language mediums, urban and rural schools and FSM, we found some differences:

- Children from schools with lower levels of FSM **appear to be advantaged** (compared to children from schools with higher FSM), as more say their school has good technology for lessons (**47% vs 39%**). **This is also true for children from Bilingual/Welsh medium vs English medium schools (51% vs 42%); and children from urban vs rural schools (46% vs 40%).**
- On matters related to 'Bring Your Own Device' (BYOD), a significantly smaller number of children **from Bilingual/Welsh medium schools report 'being able to bring in their own device' and 'use their own devices in lessons'.**

We also explored children's lessons related to general Internet use:

- Encouragingly 69% report being taught how to use search engines more effectively, and more than half say they have been taught how to blog, and use cost saving and potentially collaborative services like Google docs and spreadsheets. Fewer (32%) report that they have had lessons about Creative Commons Licenses.

## SCHOOL AND LEARNING

Digital literacy and digital citizenship education is vital to prepare, inspire and support young people to be effective, discerning and empowered citizens, and schools have a vital role to play in this. We found:

When exploring children's use of the Internet and digital technologies in their revision and homework activities, we found:

- Homework activity is centred around the family PC/laptop, though children said they would use their smartphones/tablets to research their homework.
- Children use a range of social network and social messaging platforms to discuss homework/ school work/ by calling, sending messages, doing video chat, taking screenshots, or voice notes with their friends.
- **80% of children say they have been shown good websites for homework/ revision.** However, we found that **children appear to be using a narrow range of websites for research and homework**, with sites like Wikipedia (viewed positively and negatively by different schools) dominating. **Copying and pasting content from the Internet appeared to be a common activity.**
- Children demonstrated some information critical literacy skills in homework research: most knew to look for trusted names like BBC Bite Size, as well as compare information from more than one website to check reliability.
- **Very few children appear to explore the Internet independently for learning materials.** Research tended to be linked to homework activity.
- Children highlighted the role of their parents and siblings, when they needed homework help. **This shows the importance of parent's digital literacy and competence.**

When exploring informal learning practices online (like reading/watching the news or looking up something they did not understand/ searching for information on a personal interest) we found:

- **31% of children appear to be undertaking a range of informal learning activities based on their personal interests and hobbies (compared to 17% who used the Internet for school work daily).**
- 42% of children say they have listened to podcasts or watched videos to learn something new.
- There was evidence of civic activity with 8% of children saying they have set up an online petition and 32% saying they have set up a Facebook Page to promote their interests, hobbies or causes.
- **Relatively low numbers of pupils say they have created apps (10%) or written a computer program (14%).**

When exploring schools' lessons on online safety and info-critical literacies, we found:

- Children had mixed feelings about the current provision of Internet safety lessons in schools.
- **More than 80% of children said they had received lessons on topics like cyberbullying and responsible behaviour online.**
- **Fewer children (40%) report having lessons on newer platforms** like Snapchat, Instagram, Kik and Twitter, which have been adopted by more than half of all the children.
- Only half the children say they have had lessons on online scams, and evaluating content and only 40% report receiving lessons on how to report upsetting content.
- Sometimes the children were given incorrect information in their lessons.
- More than 40% of children indicate that they would like more lessons. **This suggests that current lessons may not be addressing needs.**
- Children wanted **more discussion-based lessons that involved them, more stories and more practical 'how to' lessons in relation to managing privacy settings on the platforms they used.**

When exploring BYOD and technology provision, we found:

- Over 80% of pupils said they would like better technology in schools, and Wi-Fi that they could use with their devices.
- **86% wanted to be allowed to use their own devices in lessons.**
- **More than 55% wanted better guidelines** from schools on what they can and cannot use in lessons and in school.

When exploring channels for pupils to interact with teachers outside of school hours, we found:

- Children had mixed views. **A key concern was the possible invasion of privacy.**
- Children saw social media channels as primarily for personal communication. **Having appropriate boundaries with their teachers seemed paramount.**
- Several children highlighted they would prefer to email their teachers if they had questions.

## DIGITAL SKILLS, LITERACIES AND BARRIERS

As digital literacy is a key competency for 21<sup>st</sup> century education, our research explored how digitally literate children are by studying the range of activities they undertook, their self-reported abilities across a range of skills, and their self-reported confidence online.

- Overall, many children appeared to have a range of social, technical, creative and info-critical skills that allowed them to undertake diverse online activities, safely.
- Many seemed to be creating and sharing content using simple-to-use apps and platforms like Facebook, Snapchat, and YouTube; **however this did not necessarily involve the most complicated of skills, or translate into inspiration to develop new skills.**
- **Children who undertook more activities online appeared to have better info-critical skills** – understanding better the various contexts and features of different social platforms and showing a more nuanced understanding of online communities, and the reliability of information.
- Children who used smartphones/tablets regularly also appeared to have more general and info-critical Internet skills like being able to evaluate websites, shop online, ‘get past parental controls’ and ‘change filter preferences’. **This indicates that children who use these devices are more broadly confident than children who use those devices infrequently.**
- Boys lead girls in technical skills like blocking unwanted ads, getting past parental controls, using proxy servers, and changing filter preferences; otherwise there is little difference in the genders.

Overall children’s self-reported online confidence is high.

- 96% say they know a lot about the Internet.
- More than 86% claim to know more than their parents, and 62% say they know more than their teachers.
- **97% say that they can stay safe online; only 3% feel they cannot stay safe online.**

We also explored if there were barriers to children’s online participation and found that:

- **57% of children say that they are able to participate online fully/ enjoy their time online.**
- **40% of children said the speed of the Internet was an issue.**

- 23% of girls and 15% of boys report **strangers adding them or trying to talk to them as a barrier.**
- More girls than boys (20% vs 13%) also report ‘seeing their friends getting bullied’ as a barrier, suggesting that girls perceive the Internet to be a less welcoming, more hostile peer environment.
- Overall only 15% of children report that ‘seeing things that make me feel sad, frightened or embarrassed’ stops them from participating fully online, **suggesting that 85% of children may be more resilient to negative content.**

## WELSH LANGUAGE PROVISION

We also wanted to understand some of the online experiences of Welsh speaking pupils, in relation to the Welsh language, and incorporated some extra questions to explore this with Welsh speaking pupils in the group interviews. We found that:

- Most used English as their main language online.
- When discussing searching for content online, many said that they did not find searching in Welsh as good.
- Many children also said there wasn’t much Welsh content online for their age group, listing just a few Welsh webpages they were aware of. The children said they would like to see more educational and entertainment resources in Welsh. They were also not as aware of the Welsh language content that did exist.

# CONCLUSIONS AND RECOMMENDATIONS

## SCHOOLS, LEARNING AND TECHNOLOGY

While the majority of children have access to a range of high quality smartphones, tablets, PCs, laptops and gaming devices outside of school, **only 44% of pupils have said that their school have good technology for lessons, creating a disconnect between their home and school experiences with technology.** If Wales is to achieve its ambition to provide 21st Century Education for all pupils (a goal it has prioritised through the Digital Classroom Teaching Review (2012), the ICT Steering Group Report (2013), and the current ongoing National Curriculum Review, we need to take action on several fronts.

**Welsh Government needs to ensure that all schools have high quality technology equipment and Internet access to aid teaching and learning on a consistent basis across Wales. As technologies evolve, it is crucial that school technologies, policies and teaching evolve too.**

### Pupil-Centred Provision

Getting the hardware right is just the starting point. Leading educators across the globe are developing more personalised, student-centred pedagogies to engage their learners, and develop their digital literacy (encompassing the skills, knowledge and understanding to use the Internet and digital technologies meaningfully and effectively).

**We recommend teachers take the time to understand children’s digital practices and interests, so that they are better able to engage with pupils and develop pupil-centred learning, which could, for example, include the enjoyable elements of gaming like challenge, community and achievement.**

**We recommend that teachers develop activities that encourage children’s critical thinking, problem-solving and content creation skills. The latter for example, could include pupils creating content for a wider public audience.**

**By ‘learning through doing’ pupils will be encouraged to reflect on their own power to create and develop a positive digital presence, connect with peers online, as well as develop their proficiency and confidence.** Children who are encouraged to participate online are also gaining collaborative and participative communication skills around the new media environment.

However as highlighted in the ICT Steering Group Report [2], teachers also require support to develop their digital literacy across all subjects.

**We recommend, therefore, that schools develop Digital Leadership and Continuous Professional Development (CPD) programmes for their teachers, based on sound pedagogical approaches, so that they are able to engage, inspire and work alongside children, to achieve better teaching and learning. In addition, we recommend that Welsh Government provides the necessary educational policy, guidance and resources to support this development.**

## DIGITAL INSPIRATION GAP

Apart from searching for information for homework/revision, where children appeared to use a narrow range of websites and copying and pasting content was common - **we saw little use of the Internet for independent learning related to school work.** Similarly, children do not appear to be stretched to develop their critical thinking, for example, on how the Internet or search engines work. On a daily basis, **only 17% of 13 and 14 year olds claim to use the Internet for school work, whilst 31% claim to undertake informal learning activities,** like reading the news, or searching for personal interests. **Contrast this with 75% of children using social technologies daily to connect with friends.** Children are not taking advantage of the full opportunities the Internet provides to advance their learning – **this is the digital inspiration gap.**

Similarly, we saw a number of pupils who had clearly developed greater skills in the pursuit of games like Minecraft - one developing YouTube video channels (with over 127 videos), and another who had created a business selling tie-dye t-shirts, after watching tie-dye tutorials on YouTube. **However, more children could be inspired to explore, learn and develop these skills further.**

## RESPONSIBILITY AND DIGITAL CITIZENSHIP

For schools to transform teaching and learning, they need to be stimulating environments to test and implement the best pedagogical approaches for effective teaching and learning. At present, only 23% of children report having Wi-Fi at school that they can use with their own devices, **and only 19% said they were allowed to use their own devices in lessons.**

**Many schools are risk averse, and prefer to manage Internet access through restriction.** Yet, if the Internet is the largest learning environment in the world, being able to discern the good from the bad, evaluate content and understand how online networks work are key literacies. **The approach of blocking does not support the development of digital literacy or digital citizenship.**

**We propose that schools rethink how they engage with young people to develop their digital literacy and digital citizenship skills. Responsibility is a key element of digital citizenship, and if children are not given a chance to be trusted along with the associated responsibility, we are missing a key opportunity to develop their digital citizenship.**

**We recommend that schools consult with pupils and trial the use of personal devices in lessons/ school time (often referred to as Bring Your Own Device – BYOD), but with clear guidance around use, self-management and behaviour. These trials should be evaluated, and the decisions discussed with the pupils.**

## ONLINE SAFETY, RESILIENCE AND DIGITAL CITIZENSHIP

**Our findings highlight that children are creative and confident in dealing with the inevitable negative aspects of the Internet, with over 70% having at least four proactive coping strategies and 97% expressing confidence in their ability to keep safe online. This resilience is an important skill, considering that 42% received messages that upset them from peers and others they interacted with online.** They have strategies for keeping safe online that perhaps adults may not be aware of, and many express boredom with current online safety lessons. **They want lessons that are discussion based and which involve them more centrally.**

**We recommend that schools recognise children as experts in their own Internet use, and take the time to understand their experiences and involve them as co-researchers to develop peer-programmes they can help deliver – on themes that encompass positive, creative and responsible Internet use. This will help schools develop a culture of digital citizenship. We also recommend that schools support pupils to build resilience so they can manage online risk.**

The key is that pupil participation should not be a one-off activity, but should contribute to an ongoing programme which refines itself and which provides opportunities for the wider student body to feed into. These programmes should also incorporate context specific examples of online use, like online gaming or use of new platforms like Snapchat, Instagram, Kik and Twitter, which have been adopted by more than 50% of children.

## ONLINE PRIVACY

As privacy is a function of who you are connected to, their actions, your actions, and digital literacy, as well as the technical options provided by social platforms, those seeking to provide guidance should take note of this to ensure that guidance can be more nuanced and context dependent.

We recommend that when educating children around managing their privacy online, educators should take the time to study the many different features of social platforms online. Simple privacy messages like use 'privacy settings' may give a misguided belief that children are private online. However, using privacy settings is not the same as being completely private online.

We recommend that online safety lessons should steer clear of 'scare-mongering' tactics as they do not help efforts to promote digital literacy or prepare pupils to think critically about their privacy, data, or how they can best use these social platforms safely, without compromising their privacy.

## PARENTS AND CARERS

As children's experiences are increasingly being mediated through personal devices, and in more private spaces not easily open to parental supervision.

We therefore encourage parents and carers to communicate with their children and create a supportive environment where children are able to express their concerns easily.

Our findings show that 13 and 14 year olds still turn to parents and carers for support, guidance, and homework help. Yet 9% of children say the reason for 'lower parental mediation of their Internet use' is 'because parents did not know how to use the technology'.

We recommend that parents and carers develop their overall digital competency (where necessary) as a way of supporting their children's positive and safe use of the Internet and digital technologies. We also recommend that they familiarise themselves with the newer social platforms that children use, so that they are better able to communicate and support their children to use these positively and safely.

## WELSH LANGUAGE PROVISION

Our findings from Welsh speaking children show that most still used English as their main language online, citing a lack of Welsh language content available for their age group. Some were less aware of the educational content that does exist.

We recommend that broadcasters and other Welsh language content producers, develop more Welsh language resources, and highlight resources which already exist.

## COMPUTING

Our findings show that relatively low numbers of pupils say they have created apps (10%) or written a computer program (14%). Computing is increasingly being recognised as a necessary skill in the curriculum.

**We recommend that schools offer children opportunities to develop their computing skills.**

## FURTHER RESEARCH

This project has given us a bench mark set of data for the online digital media habits and digital literacy of 13 and 14 year olds in Wales. However, there are still questions that require more time and analysis of the data. We will be seeking support to do this, and to do follow up longitudinal work exploring how children's practices and literacies change as they get older.

# 1 INTRODUCTION

Today's children grow up in an always evolving, media rich, globally networked environment which is increasingly being accessed through mobile devices. Ofcom's Children's Media Use and Attitudes Report (October 2014) highlights the continued growth year on year in mobile devices and smartphones ownership amongst children. The use of these and other convergent devices like game consoles and laptops, plus the increasing availability of Wi-Fi, 3G/4G mobile coverage means that for many of us, constant connection to these digitally mediated 'Internet spaces' and services is an everyday reality.

To benefit from these online opportunities, young and old need to be digitally literate to be able to navigate these spaces critically, access information, network, learn, develop content, share, collaborate and participate, and keep safe online. We need to understand online networks and information flow as these determine control and social capital. We also need to be conscious of information overload and distraction and to develop the means to use online technologies meaningfully and mindfully (Rheingold, H., 2012; Coplin, D. 2014).

This constant connection to a media rich world is affecting growing up, family life, education, learning and socialising, business and more (Ito et al., 2010). While there is growing appreciation of the many opportunities that the Internet and digital technologies present, in the UK, the media and research in connection to children's use of the Internet and digital technologies has dominantly focussed on the risks and harm to children - like exposure to violence, adult content, cyberbullying, sexting and sextortion.

However, seminal research by Professor Sonia Livingstone, lead researcher of two key projects: the UK Kids Go Online and large scale EU Kids Go Online projects (2003 -2005 and 2006-2014 respectively) has cautioned against a simple assumption that risk is the same as harm. Her research has shown that whilst online opportunity and risk *are* interdependent –i.e. the more children use the Internet, the wider the opportunities taken up, and the more likely they are to encounter risk (Livingstone & Helsper, 2010; Staksrud et al., 2013) - investment in digital skills can reduce the potential harm that risks can bring; similarly factors like 'parental active mediation' can reduce exposure to online risks without reducing online opportunities (Duerager & Livingstone, 2012).

Other studies have also suggested that developing young people's online resilience may be an effective way of ensuring that risks don't migrate to harm (The Byron review, 2008). As our interest is in ensuring that young people develop the digital competencies needed to thrive online, it is noteworthy that a recent study by Przybylski et al., (October 2014), with 14-17 year found that '*building the fundamental digital competencies of young people could have unexpected yet positive knock on effects in terms of fostering resilience and positive engagement across a host of online settings*'. Another large study by Davies & Eynon (2013) also makes the point that the benefits of using Internet based technologies far outweigh any perceived risks.

For those concerned about the tensions between children's online safety and wellbeing and their use of the Internet and digital technologies, these studies highlight key points of consideration.

There are other parts of the jigsaw that we need to pay attention to.

Globally, there is a recognition that newer platforms, collaborative and participative technologies are changing education. Work by researchers like Mitra, S. (2013), Wesch, M. (2009), Jenkins, H. (2006), Ito et al. (2013) and others are pointing the way to newer pedagogies which can better engage pupils in more personalised, student centred learning. This new media ecology calls for more dynamic skills and digital competencies that include online collaboration, participation and information literacy (Rheingold, H., 2012).

It is clear that nations today need to ensure that their education systems are agile and embrace the opportunities that global digital connectivity provides. Education must also equip young people for participation in a global networked society, and embedding digital literacy and digital citizenship in the curriculum in relevant, meaningful and age appropriate ways is essential.

There is another key issue in all of this - one of children's rights online. In their conference paper in 2011, Davies, Bhullar & Dowty highlighted the need to rethink responses to children and young people's online lives using the classification of the UN Convention on the Rights of a Child of Provision, Protection and Participation rights (Cantwell, 1993). The paper proposed '*a range of practical principles to guide the design of responses to young people's online lives including: supporting digital citizenship;*

*empowering young people; having robust responses to risk; promoting resiliency; providing positive spaces; and allowing young people to shape services*’. This sentiment is echoed by other researchers (Third et al., 2014; Livingstone and Bulger, 2013).

What does this mean for educators in Wales, or for those interested in children’s online wellbeing, children’s digital literacy, online participation and digital citizenship?

Before we can begin to formulate responses and propose solutions, we need to first understand how children in Wales use the Internet and digital technologies, and their experiences, fears and motivations online. This research programme was undertaken with the aim of establishing such an evidence base, focussed on the experiences of children in Wales.

## 1.1 WALES: OUR RESEARCH PROJECT

In March 2012, the [Digital Classroom Teaching Task and Finish Group](#) commissioned by then Education Minister Leighton Andrews, launched a report called [‘Find it, make it, use it, share it: learning in digital Wales’](#) which explored ‘which digital classroom delivery aspects should be adopted to transform learning and teaching’ for those aged 3–19 in Wales. It made 10 key recommendations, one of which was:

*“Ensure that a culture of digital citizenship is encouraged and developed by teachers and learners. In addition to key digital skills, this will help learners develop the competencies and values to use digital technologies responsibly, ethically and safely, with an understanding of the security and legal issues surrounding the ‘digital space’.”*

It is against this backdrop that we proposed our research programme. Its aim is to provide an evidence base for policy makers in Wales, educators, and those who otherwise work with or engage with children and who are interested in children’s digital literacy, online participation and digital citizenship - and recommendations on how best to support them to be empowered, digital citizens.

With match funding support from our research partners, the Children’s Commissioner for Wales, Logicalis and S4C, WISE KIDS embarked on a research programme (comprising qualitative and quantitative parts) to study ‘the Internet and digital media habits, and digital literacy of Year 9 pupils (13 and 14 year olds) in Wales’.

We chose Year 9 pupils for our study as we felt 13 and 14 year olds represent a transitional age group. As children become teens, they naturally seek more privacy and autonomy. For these reasons, we also felt this age group would provide us with a useful benchmark of insights to our research questions below.

The research aimed to ask the following overarching question:

*How can we best support children in Wales to be digitally literate and empowered digital citizens, able to use the Internet and digital technologies positively and safely?*

### It aimed to provide insights on:

- How Year 9 pupils (13 and 14 year olds) in Wales are using the Internet and digital technologies in a social and educational context; their experiences, perceptions, motivations and behaviours.
- How digitally literate they are: how able they are in using the Internet and digital technologies critically, positively and safely, for socialising and for education.
- How knowledgeable and skilled they are in keeping safe online, and the practices they adopt.
- Their perception of the provision and use of the Internet and digital technologies in school; their perception of online safety lessons.
- Their perception of parental mediation and support related to their use of the Internet and digital technologies.
- The barriers that stop them from participating fully online.
- How they would like to be engaged to become empowered digital citizens.

## 1.2 GENERAL INFORMATION

The research project had qualitative and quantitative parts. It started with eight small group interviews with 34 pupils from four schools across Wales. These were carried out in the children’s schools. This was followed by formal, semi-structured one-to-one interviews with 24 of them, held in their own homes. A total of 36 pupils were involved as an additional two had to be recruited for the one-to-one interviews. In total we spent approximately 45 hours speaking to children in their homes and schools. The findings from these qualitative interviews were used to inform the design of an online in-depth questionnaire.

This was tested with a small group of pupils to ensure they understood the questions. The questionnaire, which was offered bilingually, with pupils choosing the language to complete it in - was then completed online by Year 9 pupils from 24 schools across Wales, during school time.

To ensure the sample was representative, we looked for: urban and rural schools; English medium and Bilingual/ Welsh medium schools; schools with a differing spread of pupils receiving free school meals (FSM) – the latter being a proxy for a spread of different socio-economic status.

The categorisation of schools based on the number of pupils they had who received FSM was taken from Stats Wales. Similarly, the classification of schools as being in ‘rural’ or ‘urban’ areas was obtained from the Edubase website.

Table 1.2 provides details of the respondent data from the quantitative study.

In total there were 2081 pupil respondents, aged 13 and 14 [1030 boys and 1051 girls] from Year 9 from 24 schools across Wales. These schools represented a good mix of urban and rural schools, English medium and Bilingual/Welsh medium schools, and schools with levels of pupils receiving free school meals (FSM).

**All the pupils who completed the questionnaire had some level of Internet access and there was no pupil who did not have access to at least one of the devices listed in Table 2.20.** Other details on the research methodology and research team are provided in Appendix A and B.

***Throughout this report the following terms will be used to refer to the Year 9 pupils (13 and 14 year old children) who participated in our qualitative and quantitative research: ‘children/ pupils/ participants/ 13 and 14 year olds’.***

### Limitations

The qualitative findings, drawn from both group and one-to-one interviews, involved a total of 36 pupils, and as such, are not presented as statistically generalisable results. However they gave us invaluable insight into the experiences, literacies and views of children, in their own words.

**Table 1.2 Respondent data from the quantitative questionnaire**

Respondents (%):	
Total number of respondents (N=2081)	100
Boys	49
Girls	51
13 year olds	38
14 year olds	62
Pupils who responded in English	88
Pupils who responded in Welsh	12
Pupils from English medium schools	68
Pupils from Bilingual schools	25
Pupils from Welsh medium schools	7
Pupils who came from schools where more than 20% of children receive free school meals (FSM)	23
Pupils who came from schools where between 10% and 20% of children receive FSM	37
Pupils who came from schools where less than 10% of children receive FSM	40
Pupils from Urban Schools	72
Pupils from Rural Schools	28
Use smartphones daily	69
Use tablets daily	49
Use smartphones or tablets at least once a month	94
DO NOT use smartphones or tablets at least once a month	6

The formal, semi-structured, one-to-one interviews lasted approximately 1.5 hours and were carried out by researchers in the pupil’s homes. In a few instances the parents sat in on these sessions. We recognise a limitation that as some of the questions asked the pupils about their personal experiences when using the Internet in a social and educational context, on occasion, they may not have been as forthright as they could have been.

### Next sections

The next sections of the report present the findings from the research. The findings are divided into the following sections:

- Internet Use – Where, How and How Often
- Personal and Social Experiences
- Online Safety, Resilience and Privacy
- Parental Mediation
- School and Learning
- Digital Skills, Literacies and Barriers

As and where relevant, sections of the report will interweave the qualitative analysis and quotes from the children who took part in the group and one-to-one interviews – with the quantitative findings. This will enable us to highlight some of the reasons, motivations and thoughts of the children we spoke to. All names have been anonymised.

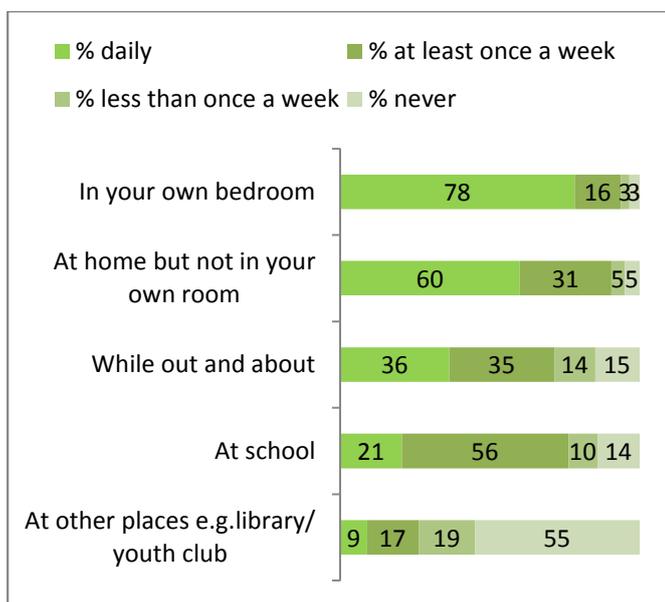
## 2 INTERNET USE – WHERE, HOW AND HOW OFTEN

Children’s online experiences are shaped and affected by a number of factors – including family environment, education, digital skills and literacies, their sense of wellbeing, and levels and quality of Internet access. This section presents findings on several aspects of Internet use in the lives of Year 9 pupils: their location of Internet use, the frequency of use in those locations; their location of Internet use by gender and by schools with different levels of free school meals (FSM); the devices used to access the Internet and their frequency of use; the devices used to access the Internet by gender and by schools with different levels of free school meals (FSM).

### 2.1 LOCATION OF INTERNET USE

Figure 2.1 presents how often children use the Internet in different locations.

**Figure 2.1 How often children use the Internet in different locations**



**Q6 a-e: How often do you go on the Internet or access an Internet service (e.g. from a laptop, tablet, smartphone, game console or any other device you may use to go online) at the following locations...**  
Base: All children; N=2081.

Figure 2.1 shows that **the home is the main place for daily Internet access, with most of this happening in children’s bedrooms (78% daily, 94% at least once a week). More than 70% are using the Internet whilst ‘out and about, at least once a week’. However, daily access in schools is comparatively low at 21%, with**

**24% of children saying they use it less than once a week in school.**

Table 2.1 presents the location of daily Internet use by gender and by schools with different levels of FSM.

**Table 2.1 Location of daily Internet use by gender and FSM**

	Boys	Girls	From schools with less than 10% FSM	From schools with between 10% and 20% FSM	From schools with more than 20% FSM	All
%						
In your own bedroom	76	80	74	82	81	78
At home but not in your own room	54	65	65	57	56	60
While out and about	29	44	33	35	44	36
At school	17	25	20	17	26	21
At other places e.g. library/ youth club	8	10	8	9	11	9

Base: All children; N=2081.

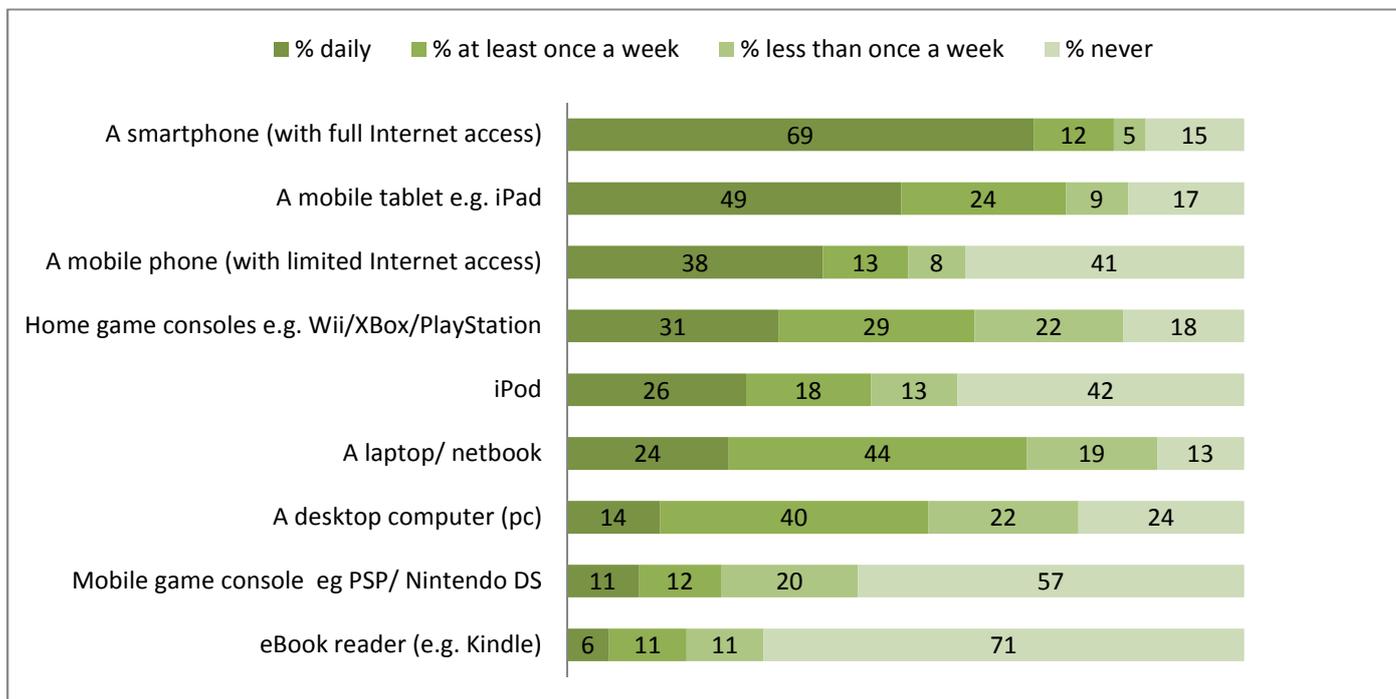
Results from Table 2.1 shows that **overall gender differences in location of Internet use are small, however there is a slightly larger difference between the genders for ‘out and about’ Internet use – with girls leading boys (44% vs 29%).**

Similarly, there is little overall difference in location of use when comparing children from schools with different levels of FSM. However, **children from schools with higher levels of FSM are accessing the Internet slightly more when ‘out and about’ (44% vs 33%), than children from schools with less than 10% FSM.**

## 2.2 DEVICES USE

Figure 2.2 shows how frequently children are using different devices to access the Internet.

**Figure 2.2** How frequently devices are used to access the Internet



Q5 a,b,c,d,e,f,g,i,j: How often do you use the following devices to go on the Internet or access an Internet service. Base: All children; N=2081.

Results from Figure 2.2 illustrate that children are accessing the Internet on a variety of devices. **On a daily basis however, the main devices children are using to access the Internet are the smartphone (69%), tablet (38%), mobile phone with limited Internet access (38%) and home game consoles (31%).**

Our qualitative interviews confirmed the quantitative findings above. One child explains the importance of her smartphone to her:

*Sally: "I'm always on it (my smartphone)... I feel lost without it."*

All the children interviewed had access to the Internet, and most (though not all) owned a range of devices: smartphones, tablets, game consoles, laptops, etc. which they used for a variety of activities. The interviews showed us that children viewed their devices as personal and important to them. In general, the most important device to the children interviewed appeared to be their smartphone or tablet device (if they owned these), particularly for socialising with their peers (using social network platforms) or accessing online content informally.

There was also clear evidence of multi-tasking and multiple uses of devices, illustrating nicely the convergence in services now available:

*Nick: "My iPhone...you can do everything with it. It's like an iPod, you can phone people, text people...so Facebook, Snapchat, the Google app, the weather app...just to see if it snows, YouTube...free music, BBC iPlayer...rugby football games....Kik, BBM, Instagram."*

Different factors like speed or screen size determined which device was used for which activity.

*Joseph has a Google Nexus 7: "I can turn it on in a second, and the computer takes a minute, at least."*

*Nina: "I use (my Samsung Tab 3) more because I can watch stuff on here cos it's got a bigger screen than my phone, and it's got more memory so I can download more games."*

Some devices were also used for entertainment with friends and family:

*Emma: "(Xbox Kinect –Dance Central Fitness) senses you, shows the moves on the telly and you copy them, and it ranks you... it has a webcam... I use it with friends for fun."*

If we look at use *at least once a week*, the numbers of children accessing the Internet via laptop increases.

This ties in with our qualitative findings that suggest that when it comes to typing up homework, children still prefer laptops and desktops to smartphones.

*Nick: “Mum’s computer is quite fast... so I use that for homework and YouTube and stuff.”*

However, the phone, or tablet was a homework aid ‘to do research’ or ‘look up information’. In some cases, families and siblings shared devices like tablets which highlighted privacy concerns:

*Emma: “My family share the iPad... I have Facebook and Instagram on there but that’s it – I don’t want my 7 year old sister posting gibberish on there, so I use my phone for socialising.”*

Figure 2.2 also shows that overall desktop use is lower than laptop use and tablet use, and daily use of eBook readers is still low at 6%. **It must be noted that smartphone use is still only at 80% (for usage at least once a week), with 20% of children reporting that they either never use it, or use it less than once a week.**

However, not everyone had access to the latest apps (in their homes) like Netflix or access to online gaming:

*Nick: “I have an Xbox. I haven’t got Live yet...I might ask for that for my birthday.”*

This was sometimes due to a lack of parental/young person knowledge or interest in the services available, or sometimes due to family budget constraints. One participant, Thomas explained that he had not had Internet access in his home for a long while. He visited his cousin 2 weeks before we interviewed him, and played online on his Xbox. Thomas showed us an old smartphone that had been lent to him and an old tablet that had recently stopped working (the cover was smashed). He explained that he topped up the phone himself (‘Pay as you go’) with weekly pocket money, saying it was the first thing he did once he got his pocket money. At the time of the interview, he had run out of credit.

Nevertheless, our interviews showed us that being less well-off did not always mean not having the latest devices, and we saw evidence of this.

Also, devices owned can also become less important, or be used for different purposes. According to another participant, Jay, the iPod isn’t used that much anymore – just for music when he is travelling.

Table 2.2 shows daily use of different devices to access the Internet by gender and FSM.

**Table 2.2 Devices used daily to access the Internet by gender and FSM**

%	Boys	Girls	From schools with less than 10% FSM	From schools with between 10% and 20% FSM	From schools with more than 20% FSM	All
A smartphone (with full Internet access)	65	73	69	66	73	69
A mobile tablet e.g. iPad	47	51	49	50	49	49
A mobile phone (with limited Internet access)	34	42	33	42	40	38
Home game consoles e.g. Wii/ Xbox/ PlayStation	50	13	27	33	37	31
iPod	24	29	26	27	27	26
A laptop/ netbook	26	22	23	24	26	24
A desktop computer (pc)	21	7	12	15	15	14
Mobile game console e.g. PSP/ Nintendo DS	14	7	9	11	12	11
eBook reader (e.g. Kindle)	5	7	5	6	8	6

Base: All children; N=2081.

Table 2.2 shows that there is little difference between boys’ and girls’ daily use of most devices to access the Internet - with girls slightly leading boys on use of smartphone, tablet, mobile phones, iPods and eBook readers. **The exception is game consoles which are used by 50% of boys daily and only 13% of girls.** PC use is also slightly greater amongst boys than girls (21% vs 7%).

Similarly, when comparing children from schools with different levels of FSM, **there is little difference** in the numbers of children using particular devices daily. **This suggests that children who attend a school with a higher level of FSM do not appear to be disadvantaged in their use of devices** – consistently showing equal if not slightly greater use of smartphones, laptops and eBook readers.

The one slightly greater difference is ‘Home game consoles’ use e.g. Wii/ Xbox/ PlayStation – **10% more children from schools with higher levels of FSM (37%) use this daily compared to children from schools with lower levels of FSM (27%).**

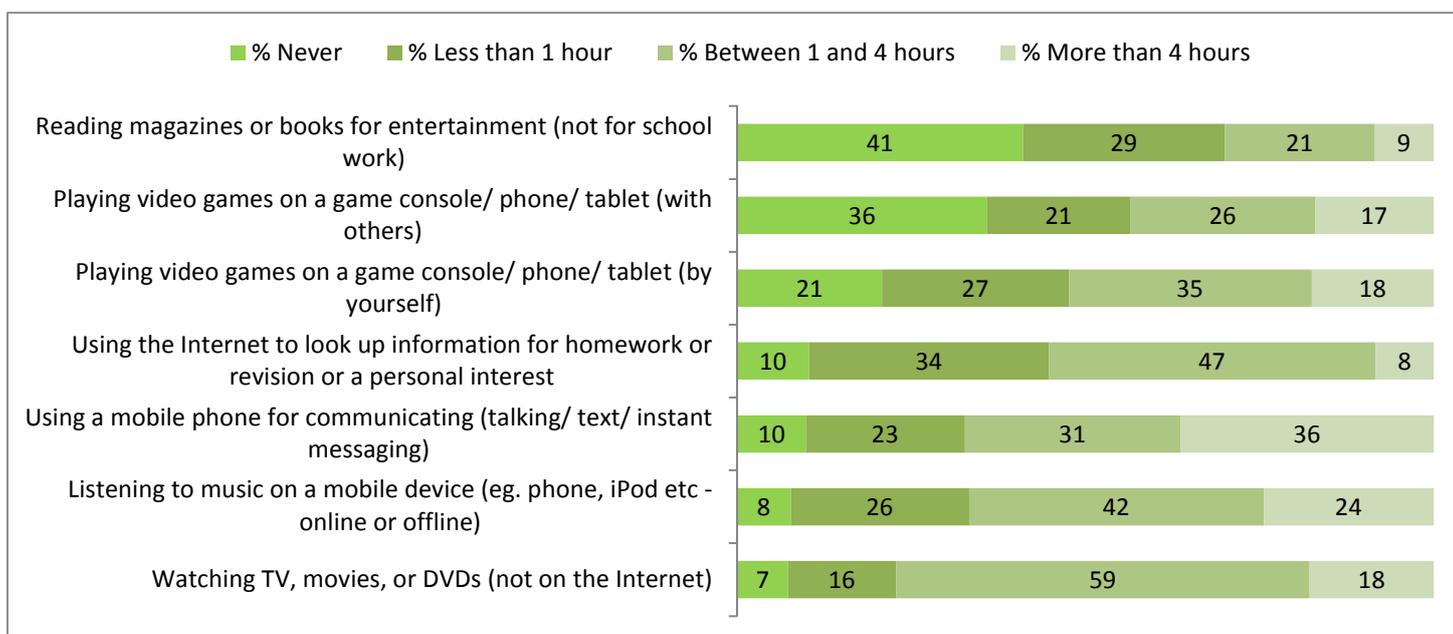
### 3 PERSONAL AND SOCIAL EXPERIENCES

This section focuses on the findings relating to the personal and social experiences of the Year 9 pupils in different contexts, including school and at home. The section is split into sub-sections covering the time spent on different activities on an average school day, and the type of personal and peer-based activities undertaken by children. This data is then analysed further, highlighting how these activities vary between children in schools with different levels of free school meals (FSM); between English, Bilingual/Welsh medium schools; and between urban and rural schools. The final part of this section looks at how the number and types of activities undertaken by children is affected by their technology use, including smartphones and tablets, and the range of social communication activities undertaken. It explores the different social media platforms used as well as their motivations for using them.

#### 3.1 TIME SPENT ON DIFFERENT ACTIVITIES ON AN AVERAGE SCHOOL DAY

Figure 3.1 highlights results from the questionnaire, showing how much time children spend on different activities, on a typical school day.

**Figure 3.1** Estimated time spent on different activities on an average school day



Q14: On a typical school day (Monday to Friday), please estimate how many hours you spend on the following activities (TOTAL time in school and out of school). Base: All children; N=2081.

Figure 3.1 points to a routine dominated by mobile communication and entertainment activities for children on a typical school day with 67% of children indicating that they spend at least 1 hour communicating online; 36% reported more than 4 hours of mobile phone communication daily. Music and entertainment activities also dominate with 66% of children listening to at least 1 hour of music on a mobile device.

These quantitative results were supported by the qualitative interviews. For example, one participant from the group interviews mentioned that he spent:

*“one (hour) on YouTube this morning” (before school). “I checked Facebook – about 10 minutes...I check Facebook before I leave the house.”*

Another participant, Tara, stated said:

*“We have friends in America and we e-mail them and I have one of them on Kik. I follow both of them on Instagram and they send photographs”*

Another child, Ryan, explained how he used the messaging service Whatsapp with his dad (his parents are separated and he lives with mum and stepdad). He sends his dad pictures of his cooking at school:

*“I’ll send him pictures of what I’ve made and he’ll send back ‘Good work! Save me some’ and I will.”*

Other interesting findings from the questionnaire revealed that **on a daily basis, 55% of children say they are spending at least 1 hour using the Internet to look up information for homework, revision or a personal interest. 10% say they are not using it at all.**

Whilst the digital world is a core part of the daily life of many children, it is important to note that **1 in 3 children say they have never played online games.**

**Children’s reports also show they are still consuming media in traditional ways - ‘watching TV, movies, or DVDs (not on the Internet)’.**

Some do however seem to be undertaking some activities intensively. **18% of children report spending more than 4 hours daily on TV, movies and DVDs. 17% report spending more than 4 hours daily playing video games with others, and 18% report spending more than 4 hours daily playing video games on their own.**

### 3.2 PERSONAL AND PEER-BASED ACTIVITIES

Table 3.2 highlights the type of online activities children undertake daily and at least once a month, by gender.

**On a daily basis, boys undertake a slightly wider range of activities (averaging 7.1) than girls (averaging 6.6) out of the 23 activities listed.**

**Overall, the most popular activities are communication and entertainment activities: ‘use of instant messaging apps’ (e.g. iMessenger, Whatsapp, Kik, BBM, Facebook Messaging, Snapchat) – (75%), and ‘watching video clips online’ (62%). However, these overall figures mask the differences in daily activities between boys and girls.**

On a daily basis, boys are also more likely than girls to play games on their own (53% vs 38%), watch video clips online (71% vs 54%), download free apps or computer program, search for information online about personal interests or to look up something they didn’t understand.

**Table 3.2 Online activities undertaken daily and at least once a month, by gender**

%	Daily			At least once a month		
	Boys	Girls	All	Boys	Girls	All
Used instant messaging apps (e.g. iMessenger, Whatsapp, Kik, BBM, Facebook Messaging, Snapchat)	66	84	75	92	97	94
Watched video clips online (e.g. YouTube, Vines)	71	54	62	99	98	98
Visited your friends and others' SNS profiles (e.g. Twitter, Instagram, Facebook, Ask.fm)	46	61	54	85	95	90
Played Internet games on your own (via an app or website)	53	38	46	95	89	92
Left comments or likes on a other SNS profiles/pages e.g. Facebook/ Twitter/ Ask.fm)	38	52	45	84	92	88
Read or watched the news on the Internet (via news websites/Twitter/ Facebook etc.)	42	39	40	87	86	86
Streamed or downloaded music or films	40	37	39	87	87	87
Downloaded free apps or computer programs	43	35	39	91	91	91
Played games with other people online (e.g. PlayStation, Xbox)	52	13	32	89	41	65
Searched for information about personal interests (sports, celebrities, etc.)	34	28	31	90	86	88
Used the Internet to look up something you didn't know or understand	33	30	31	93	94	94
Shared photos, videos or music with others	28	33	30	78	89	84
Posted a status update on your SNS profile: e.g. Facebook/ Instagram/ Twitter)	20	32	26	76	89	83
Used video chat with friends and family	25	24	25	75	85	80
Visited other people's personal websites sites (e.g. Tumblr, Blogger)	17	29	23	43	58	51
Bought apps or other things online	22	18	20	82	79	80
Used the internet for school work	20	14	17	96	97	97
Created an online character, pet or avatar	16	6	11	47	24	35
Used file sharing programs/ websites e.g. Megashare, PirateBay, Bit Torrent	14	9	11	38	28	33
Looked up maps or timetables	13	7	10	68	62	65
Spent time in a virtual world (e.g. Habbo, Teen/Second Life)	10	5	7	29	19	24
Read an eBook (e.g. on a Kindle)	5	8	6	26	35	30
Used video chat with a stranger (e.g. Skype, Oovoo, Facetime)	8	4	6	24	17	20

**Q11, 12, 13: Which of the following things have you done in the past month on the Internet? Base: All children; N=2081.**

Girls, on the other hand, are more likely to use instant messaging apps (84% vs 66%), visit friends' and others' social network profiles (61% vs 45%), visit other people's personal websites, post a status update and leave comments or likes on other social networking profiles, share photos, videos and music.

**However, boys are also more likely to play games online with friends (52% vs 13%).** This suggests that boys appear to socialise more through online gaming, whilst girls tend to socialise more through use of social network services and social messaging apps. Entertainment activities like watching video clips are popular with both sexes.

**Daily use of the Internet for school work is still relatively low at 17%, with boys using it more than girls (20% and 14%).** Similarly, activities that involve creating virtual pets/ characters, or participating in virtual worlds appear to be less popular at 11% and 7% respectively.

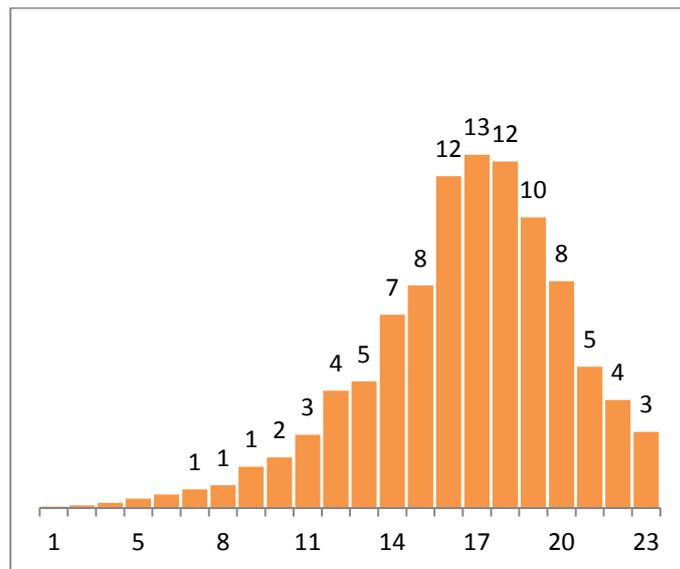
When comparing overall children's activities that have been *undertaken at least once a month*, the most popular activity is 'watching video clips online' (98%) and 'using the Internet for school work' (97%). 94% of children also used the 'Internet to look up something they didn't know or understand' as well as used 'instant messaging apps' to communicate. Playing internet games on their own also ranked highly at 92%.

Figure 3.2 shows the percentage of children who take up the different number of activities listed in Table 3.2, at least once a month.

As can be seen, **most children take up between 15 and 19 of the 23 activities listed above.** Only 13% of the children take 12 activities or less and 20% of the children take up 20 or more activities.

Overall the average number of activities undertaken on a monthly basis is **16.7 for boys and 16.4 for girls.** This relatively high number of activities undertaken by boys and girls may be due to the technologies now available and the activities that are now made possible by greater connectivity, newer devices and apps.

**Figure 3.2 Percentage of children who take up the different number of activities listed in Table 3.2 at least once a month**



Base: All children; N=2081.

### 3.3 SCHOOLS WITH DIFFERENT LEVELS OF FREE SCHOOL MEALS (FSM)

In order to understand if there are differences between the daily activities of the different groups of children undertaking the questionnaire, Table 3.3 presents a comparison in the activities of children from schools with different levels of pupils accessing free school meals (FSM). It is of note that almost all the children from schools with greater than 20% of children on FSM actually undertake **slightly more activities** than the children from schools with lower levels of FSM. This includes activities like watching videos online, using social messaging, visiting social network profiles and commenting on them, as well as gaming and informal learning activities like 'using the Internet to look up something you didn't know or understand'.

**The only activity which had a higher level of participation from children from schools with less than 10% of FSM was the activity 'use the Internet for school work'.**

**Table 3.3 Daily online activities of children from schools with different levels of FSM**

%	From schools with less than 10% FSM		
	From schools with less than 10% FSM	From schools with between 10% & 20% FSM	From schools with more than 20% FSM
Used instant messaging apps (e.g. iMessenger, Whatsapp, Kik, BBM, Facebook Messaging, Snapchat)	73	74	80
Watched video clips online (e.g. YouTube, Vines)	58	64	67
Visited your friends and others' social networking profiles (e.g. Twitter, Instagram, Facebook, Ask.fm)	49	54	61
Played Internet games on your own (via an app or website)	41	47	52
Left comments or likes on a other SNS /pages e.g. Facebook/ Twitter/ Ask.fm)	38	46	56
Read or watched the news on the Internet (via news websites/Twitter/ Facebook etc.)	37	43	43
Downloaded free apps or computer programs	35	39	46
Streamed or downloaded music or films	34	39	46
Searched for information about personal interests (sports, celebrities, etc.)	28	32	34
Used the Internet to look up something you didn't know or understand	28	34	33
Shared photos, videos or music with others	26	31	37
Played games with other people online (e.g. PlayStation, Xbox, PSP, Nintendo)	25	33	42
Visited other people's personal websites sites (e.g. Tumblr, Blogger)	21	23	27
Posted a status update on your SNS profile: e.g. Facebook/ Instagram/ Twitter/ Ask.fm)	21	25	37
Used the internet for school work	19	15	15
Used video chat with friends and family	19	26	32
Bought apps or other things online	17	22	23
Used file sharing programs/ websites e.g. Megashare, PirateBay, Bit Torrent	11	11	13
Looked up maps or timetables	9	11	11
Created an online character, pet or avatar	7	12	15
Read an eBook (e.g. on a Kindle)	6	6	8
Used video chat with a stranger (e.g. Skype, Oovoo, Facetime etc.)	5	7	6
Spent time in a virtual world (e.g. Habbo, Teen/Second Life)	5	9	9

Base: All children; N=2081.

### 3.4 ENGLISH AND BILINGUAL/WELSH MEDIUM SCHOOLS

We also wanted to explore if there were differences in activities undertaken by children from English

medium schools and children from Bilingual/Welsh medium schools. Table 3.4 presents these findings.

**Table 3.4 Daily and monthly online activities of children by school language medium**

%	Daily		At least once a month	
	English medium	Bilingual & Welsh medium	English medium	Bilingual & Welsh medium
Used instant messaging apps (e.g. iMessenger, Whatsapp, Kik, BBM, Snapchat)	77	71	95	94
Watched video clips online (e.g. YouTube, Vines)	64	59	98	98
Visited your friends and others' SNS profiles (e.g. Twitter, Instagram, Facebook, Ask.fm)	57	46	91	87
Played Internet games on your own (via an app or website)	48	40	92	92
Left comments or likes on a other SNS profiles/pages e.g. Facebook/ Twitter/ Ask.fm)	47	41	89	86
Read or watched the news on the Internet (via news websites/Twitter/ Facebook etc.)	42	37	87	85
Downloaded free apps or computer programs	42	33	92	90
Streamed or downloaded music or films	41	35	88	87
Played games with other people online (e.g. PlayStation, Xbox, PSP, Nintendo)	37	22	68	59
Searched for information about personal interests (sports, celebrities, etc.)	34	26	88	87
Used the Internet to look up something you didn't know or understand	33	27	95	93
Shared photos, videos or music with others	32	27	85	81
Posted a status update on your SNS profile: e.g. Facebook/ Instagram/ Twitter/ Ask.fm)	30	19	84	81
Used video chat with friends and family	28	18	81	78
Visited other people's personal websites sites (e.g. Tumblr, Blogger)	25	19	52	49
Bought apps or other things online	22	16	81	79
Used the internet for school work	18	15	97	97
Used file sharing programs/ websites e.g. Megashare, PirateBay, Bit Torrent	13	9	35	30
Looked up maps or timetables	12	8	64	68
Created an online character, pet or avatar	12	8	37	31
Spent time in a virtual world (e.g. Habbo, Teen/Second Life)	8	7	25	22
Read an eBook (e.g. on a Kindle)	7	6	31	30
Used videochat with a stranger (e.g. Skype, Oovoo, Facetime etc.)	6	6	18	25

Base: All children; N=2081.

It is noteworthy that when looking at activities undertaken daily (which is an indication of how embedded the activities are), children from English medium schools appear to be **undertaking more activities** on average than children from Bilingual or Welsh-medium schools. This difference is notable on social networking and gaming activities, and less

notable on school-related Internet use. For the least popular activities like video chat with a stranger, or pending time in a virtual world the differences are smaller.

However, when looking at the activities *undertaken at least once a month*, the differences between the numbers of activities undertaken by children from English and Bilingual or Welsh-medium schools is smaller.

Overall, the reasons for these differences are not yet clear, and are worth a more in-depth, multi-variate exploration of the data.

### 3.5 URBAN AND RURAL SCHOOLS

Another aspect we explored in the quantitative results was whether there were any differences in the daily and monthly activities of children by school urban/rural location. Table 3.5 presents these findings.

It is also worth noting that, when looking at activities undertaken daily (which is an indication of how embedded the activities are), children from urban schools appear to be undertaking slightly more activities than children from rural schools. This could be due to poorer connectivity issues in rural areas – however this requires more investigation.

When looking at the activities *undertaken at least once a month*, the differences between the numbers of activities undertaken by children from urban and rural schools is smaller. In some activities - like using the Internet for school work, social networking, news or entertainment - the differences are negligible.

**Table 3.5 Daily and monthly activities undertaken by children by school urban/rural location**

%	Daily		At least once a month	
	Urban schools	Rural schools	Urban schools	Rural schools
Used instant messaging apps (e.g. iMessenger, Whatsapp, Kik, BBM, Snapchat)	76	73	95	94
Watched video clips online (e.g. YouTube, Vines)	64	57	98	98
Visited your friends and others' SNS profiles (e.g. Twitter, Instagram, Facebook, Ask.fm)	56	48	91	87
Played Internet games on your own (via an app or website)	48	40	92	92

Left comments or likes on a other SNS profiles/ pages e.g. Facebook/ Twitter/ Ask.fm)	48	37	89	87
Downloaded free apps or computer programs	42	31	92	88
Read or watched the news on the Internet (via news websites/Twitter/ Facebook etc.)	41	38	87	86
Streamed or downloaded music or films	41	34	87	88
Played games with other people online (e.g. PlayStation, Xbox, PSP, Nintendo)	34	27	67	60
Searched for information about personal interests (sports, celebrities, etc.)	33	26	89	86
Used the Internet to look up something you didn't know or understand	33	26	95	91
Shared photos, videos or music with others	32	26	85	81
Used video chat with friends and family	28	18	81	77
Posted a status update on your social networking profile: e.g. Facebook/ Instagram/ Twitter/ Ask.fm)	28	21	83	83
Visited other people's personal websites sites (e.g. Tumblr, Blogger)	25	18	52	47
Bought apps or other things online	21	17	81	79
Used the internet for school work	17	16	97	97
Used file sharing programs/ websites e.g. Megashare, PirateBay, Bit Torrent	13	8	35	29
Created an online character, pet or avatar	12	9	37	30
Looked up maps or timetables	11	8	65	67
Spent time in a virtual world (e.g. Habbo, Teen/Second Life)	8	6	25	22
Read an eBook (e.g. on a Kindle)	7	5	31	30
Used videochat with a stranger (e.g. Skype, Oovoo, Facetime etc.)	6	6	19	25

Base: All children; N=2081.

### 3.6 SMARTPHONE AND TABLET USERS

Given the rise in use of smartphones and tablets we wanted to see if there was link between the daily use of a smartphone or tablet and the activities undertaken – i.e. is active use of these devices linked to greater take up of activities. Table 3.6 presents these findings.

As can be seen, **daily smartphone and tablet use is linked to greater take up of most activities**. These include learning activities (school and non-school related), entertainment activities and socialising activities. Examples of these are 'using the Internet for school work', 'searching for information on personal interests', 'looking up something you didn't know or understand', 'reading or watching the news', sharing links, communicating using social messaging apps and social networking activities like visiting friend's profiles, leaving comments and likes.

As can be expected, daily smartphone and tablet use shows little bearing on online gaming activities which used game consoles.

As we are comparing **daily activities** undertaken with **daily use and non-use of smartphones and tablets**, it would be a fair assumption to say that many of the activities listed above may be carried out using these devices. **However, we cannot say this definitely, as there may be activities that are carried out on other devices.**

As smartphones and tablet use is linked to greater take up of activities, and those who undertake more activities are likely to be able to hone their skills more, with higher skills allowing them to take more advantage from the opportunities that these devices offer - we can see that lack of use of devices like smartphones could lead to a different sort of skills divide, one which leaves non-users less able to exploit opportunities online.

**Interestingly, even though many children appear to use tablets and smartphones, relatively few appear to be exploiting the educational apps and opportunities these devices allow.** Only 19% of children who use a smartphone or tablet daily, use the Internet for school work.

**Table 3.6 Daily online activities undertaken by children who use: a smartphone daily/not; a tablet daily/not**

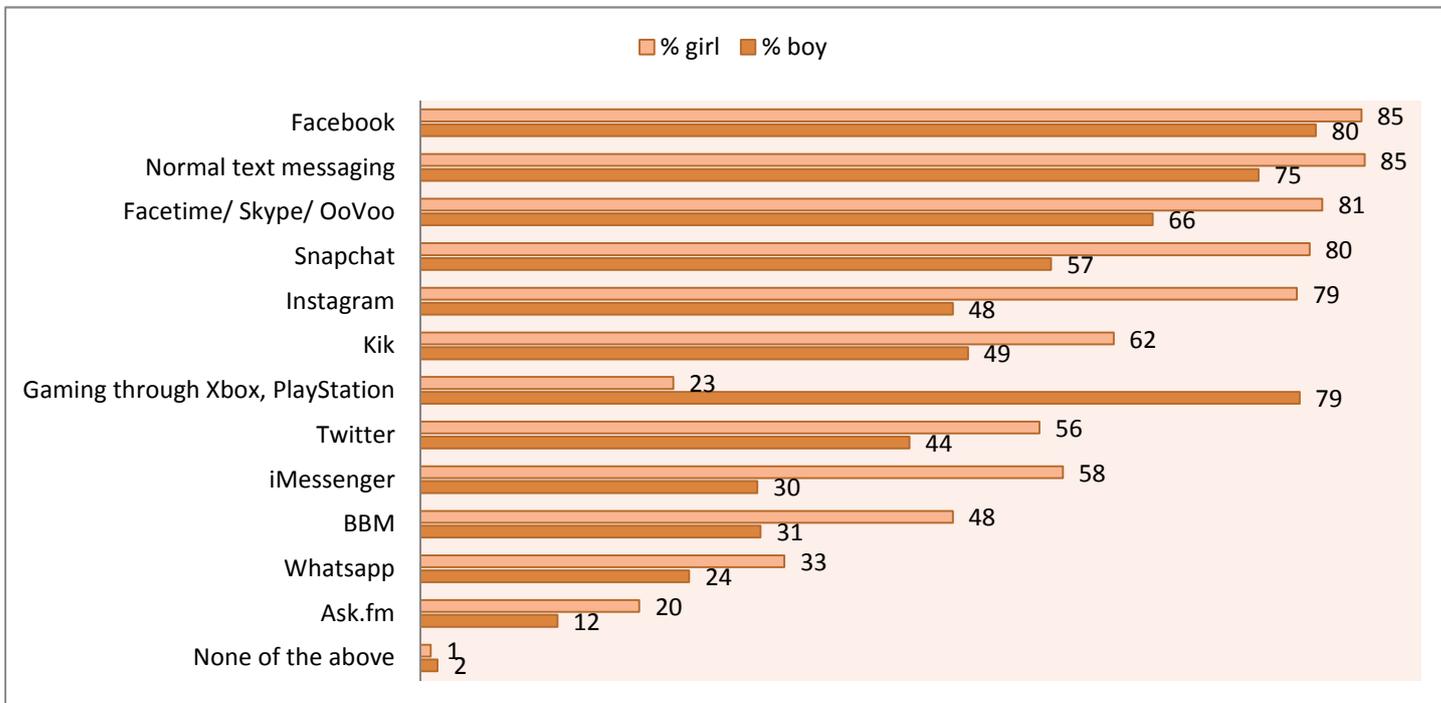
% Who have...	Daily smartphone user	Non smartphone user	Daily tablet user	Non tablet user
Used instant messaging apps (e.g. iMessenger, Whatsapp, Kik, BBM, Snapchat)	85	53	82	70
Watched video clips online (e.g. YouTube, Vines)	66	52	70	58
Visited your friends and others' social networking profiles (e.g. Twitter, Instagram, Facebook, Ask.fm)	62	40	62	47
Left comments or likes on a other social networking profiles/pages e.g. Facebook/ Twitter/ Ask.fm)	53	28	53	37
Played Internet games on your own (via an app or website)	48	42	54	38
Read or watched the news on the Internet (via news websites/Twitter/ Facebook etc.)	45	31	47	38
Streamed or downloaded music or films	44	29	48	32
Downloaded free apps or computer programs	44	29	48	32
Shared photos, videos or music with others	36	20	38	24
Searched for information about personal interests (sports, celebrities, etc.)	34	25	37	26
Used the Internet to look up something you didn't know or understand	34	27	38	27
Played games with other people online (e.g. PlayStation, Xbox, PSP, Nintendo)	33	32	36	31
Posted a status update on your social networking profile: e.g. Facebook/ Instagram/ Twitter/ Ask.fm)	31	19	33	22
Used video chat with friends and family	29	17	33	19
Visited other people's personal websites sites (e.g. Tumblr, Blogger)	28	14	28	19
Bought apps or other things online	23	14	27	14
Used the internet for school work	19	14	19	15
Used file sharing programs/ websites e.g. Megashare, PirateBay, Bit Torrent	14	9	14	10
Looked up maps or timetables	11	9	13	8
Created an online character, pet or avatar	11	13	13	12
Spent time in a virtual world (e.g. Habbo, Teen/Second Life)	8	8	10	7
Read an eBook (e.g. on a Kindle)	7	6	8	4
Used video chat with a stranger (e.g. Skype, Oovoo, Facetime etc.)	7	4	7	4

**Base: Daily smartphone users (N=1435) Non-users of smartphones (N=302); Daily tablet users (N=1027) Non-users of tablets (N=356);**

### 3.7 SOCIAL COMMUNICATION AND ENTERTAINMENT

Figure 3.7 shows adoption by gender - of specific social, gaming, messaging and communication services.

**Figure 3.7 Use of social, gaming, messaging and communication services by gender**



**Q7: Which of the following social, gaming, messaging and communication services do you CURRENTLY use? (multiple responses allowed). Base: All children; N=2081.**

We can see a **rich adoption of social media and messaging services across the board**, with children using a number of services. **Whilst Facebook remains the main social networking service for this age group (overall at 83%), newer services like Instagram (63%), Snapchat (68%), Twitter (50%) have also been adopted, with more girls than boys using these. Use of video chat is also high (73%).**

From the interviews, a key insight was that **social network platforms and social messaging services created important ‘common virtual spaces’ for communication, self-expression, friendship and ‘being part of the crowd’.**

*Jay: “I use Kik to mess about with my friends – just talking to them or arranging like to go to town or a sleepover or generally meeting up.”*

*Clara: “It’s easier to get hold of my friends as well, because half the time I don’t answer my phone because I don’t see the texts, and my friends are on*

*Facebook... and I don’t have half my friend’s numbers, so it’s easier to message someone on Facebook.”*

*Mary: “Usually you find out news on Twitter or Instagram then I message my friends asking if they’ve seen that post.”*

In a few instances, we saw that for children living more rurally, these virtual connections played an especially important role, enabling them to ‘remain connected’ to their friends.

**Some children wanted to try new services (e.g. Snapchat) regarding these as “new and cool”, while others were less interested.**

*Nick: “I just never really got on to Twitter...I don’t see the point if you have Facebook and everything else to socialise.”*

*Jay: “Facebook isn’t used by any of my friends anymore - only adults. Everyone has just abandoned Facebook for Instagram.”*

He feels it is because the information being posted has little value.

**Social media also gave many of them direct channels to ‘follow’ and connect with celebrities, which they valued.**

From previous sections, we know that messaging, social networking, and online gaming (for boys) are some of the main daily activities for boys and girls. We have also seen that smartphone users and tablet users are more likely to engage in these activities on a daily basis.

From Figure 3.7 we also see children using text messaging (average 80%) and adopting social messaging services that allow personal and group texts, like Kik (56%), iMessenger (44%), BBM (39%), Whatsapp (28%). What is important to note is that **not all social messaging services are the same**. Some of these services mimic what the government and public would generally have categorised as ‘chat rooms’, in that people not known to the users can make contact with them easily and often privately. Similarly, some of these services like Kik also have ‘add ons’ which seek to integrate Kik with more adult services. Interestingly in the last year, Kik has increased the minimum age of users from 13 to 18, due to its adult content services. Similarly, some of these messaging services like iMessenger, Kik and BBM do not require a mobile phone number – users can simply create accounts. This means that younger children, who may not yet own mobile phones, can also adopt these services. **In addition, social network platforms like Facebook, Google now offer their own messaging apps; and services like Instagram and Twitter also have private messaging facilities.**

**It is important therefore that we consider the dynamic environments and communities created by these newer services, and to contextualise our understanding of risks and harm within these ‘spaces’. So rather than simply considering ‘chat rooms’ we need to consider the ‘chat spaces’ created by these services, the levels of privacy and reporting allowed in these, and the parental guidance and child guidance needed for these.**

It is important to note that as before, **gaming** on an Xbox or PlayStation is a key activity for boys compared to girls - 79% vs 23%.

From Fig 3.7, we can also see that adoption of Ask.fm is low (16%). This is perhaps not a surprising finding as in 2013 the site was linked with the suicide of a 14 year old girl. Several children in the interviews mentioned this, and most of them showed a distaste for the platform, citing hate material and nasty comments. One participant, Joe, had stopped using his account. Describing the content on Ask.fm:

*“Just stuff like you’re ugly...it was stuff like that...I was just kind of sad.”*

**Another notable finding is that 1% of children say they do not use any of the social media, gaming and messaging platforms.** The qualitative interviews confirmed that not all children were equally engaged, or interested in using these services. A perception that these technologies caused more trouble than good may have been the reason.

*Megan: “every day you will hear something at school – oh, I can’t believe that person said that about me on Facebook, and I think ‘if you don’t go on them you won’t have that issue, will you’.”*

It was clear from the interviews that different platforms had different purposes, and children make conscious decisions about which to use for what. Some platforms are seen as more private and considered to be their own personal space e.g. Instagram, whilst others like Facebook appear to be more of a friends and family space (though this was not unanimously the case).

*Trudy: “My Facebook is private, because it’s like - you write statuses and my whole family is on there and I don’t want people to see all that. On Instagram it is different to Facebook- you’re not writing all that stuff on there -more for the public.”*

### 3.7.1 PERCEPTION OF ONLINE IDENTITIES

A number of the participants interviewed actively manage their identities online (as well as their ‘walls’). One common theme from the qualitative interviews related to nervousness in posting information and updates on social media, and whether their friends would give it any ‘likes’.

*Joe: “I never put my status up because I thought I’d never have enough likes (Year 7). If I had my Facebook now I wouldn’t mind too much (Year 9).”*

*Trudy: “I might remove a picture from Instagram if it hasn’t had so many likes”*

However, some of the children were not so worried about what others thought of their posts.

*Clara: “No, I just leave it there; I can’t be bothered, like a lot of things. I don’t see the point. People have already seen it.”*

Other common comments related to their appearance or embarrassing photos from the past:

*Rose: "When you add effects when you take a selfie, it gets rid of your spots etc., and you can emphasize things such as your eyes... Maybe in school, people aren't aware of what you are capable of doing in your own time and I feel as if I look uglier in school in my school uniform, so when I come home, I can take a photo of myself showing how could I look when I've dressed up smarter".*

*Participant from a group interview with girls: "My photos from when I'm younger are really embarrassing – when you're in primary school and you get a Facebook account you don't really care, but those photos are embarrassing now!" (all giggle).*

### 3.7.2 BELONGING

This research shows that children see social media platforms like Facebook and newer platforms like Instagram as very important for 'socialising' and for being 'in' with their peer group. They used platforms like Facebook to check on what is going on, rather than to 'post' necessarily. Children also expressed concern that without access to social media platforms like Facebook, they might miss out on planned activities and events.

*Melissa: "Everyone has it [Facebook], so everyone can talk to everyone... My friend, she only just got Facebook a couple of months ago. She was missing out- everyone was telling her to get it – we'd have to show her stuff like photos and funny videos, but she has got it now".*

Children who did not have access to social network platforms, for example, because their parents did not allow them access - expressed frustration. One participant, Sam, said he would like access to Facebook, but his parents won't let him because of a bad experience his sister had had.

*Sam: "It would be easier on Facebook rather than asking a girl for her phone number face-to-face."*

Sam has thought about setting up a Facebook account without telling his parents but he hasn't. He also expressed a desire to own a smartphone:

*"It's not just people saying your phone is very, very rubbish. They usually use quite bad language about the phone. They have all got smart-phones which*

*have the apps and I go – 'that's a good game' and they'd say' you can't get it because your phone is so err...'*

### 3.7.3 CREATIVE SHARING PRACTICES

Figure 3.7.3 provides the percentages of children creating and sharing videos online by gender and FSM.

**Figure 3.7.3 Video sharing practices on different social network platforms by gender and FSM**

	Boys	Girls	Schools with less than 10% FSM	Schools with between 10% & 20% FSM	Schools with more than 20% FSM	All
% Created a video and shared it on:						
<b>Snapchat</b>	42	66	51	57	58	54
<b>Facebook</b>	46	47	40	48	54	46
<b>Instagram</b>	26	51	38	37	41	38
<b>YouTube</b>	44	23	31	35	35	33
<b>None of the above</b>	30	20	28	23	22	25
<b>Vines</b>	14	12	14	13	13	13

Q15: Please use tick boxes to indicate if you have (ever)....  
Base: All children; N=2081.

As can be seen, girls are more likely than boys to create and share videos on Instagram and Snapchat. From previous results we know girls are bigger users of those platforms. Based on the list above, Facebook is the most popular platform for video sharing for boys (46%), whilst Snapchat is the most popular for girls (66%). On YouTube, boys are far more likely than girls to create and share videos (44% vs 23%).

Interestingly, when we compare video sharing practices across schools with different levels of FSM, there is little difference. One notable exception is 'creating and sharing videos on Facebook', where **children from schools with higher levels of FSM lead those from lower levels of FSM by 14%.**

**Overall 25% of children say they have NOT created or shared videos on any of the platforms above.**

It is important to note that the questionnaire did not seek to establish whether these were videos simply filmed and uploaded, or specially made and edited for these platforms, some of which like YouTube and Facebook, which allow this. Thus it would be difficult to draw conclusions simply from this data, as to how

skilled the children are, beyond the simple act of filming and uploading.

From the qualitative interviews there was also plenty of evidence of personal and creative use of technology made possible by the availability of easy-to-use apps for video editing like Video Star, as well as features on social messaging apps like Snapchat - which allow users to take videos and photos over a 24 hour period and share them with their friends list as a 'Snapchat Story'.

*Nick: "I like to post funny videos of me and my friends...just our friends on Facebook can see that...doing a dance or something with the new song-Harlem Shake...just fooling around with your friends."*

*Joseph: "There's a thing called pixel art where if you see something you like on the internet...you can literally try to copy that with blocks...and if you try to see it from afar...it can look like the picture...feels fun, because if you do the thing when you do the cool artwork...it feels amazing...I take screenshots and put it on Facebook or something."*

One child, Evan explained that he loved creating his own videos and had his own YouTube. At the time of the interview, he had 127 videos, 50 subscribers, and over 6000 views.

*"I go on my YouTube channel as soon as I get back from school to see what's happened while I've been at school.... I don't really actually do my homework at home.....I find it really fun to upload videos and I think...because I've got some comments saying stuff like "good video" and stuff like that....if they think they're good I might as well make some more."*

During the interviews, another child, Nina, showcased a video montage she made that used a years' photo stream of photos taken from Facebook, Twitter and Instagram, using a specific app. She explained that she did it because everyone else started to use the app (she saw it on Facebook): "it became a big thing".

### 3.7.4 GAMING

From previous sections we know that gaming is a significant activity for boys, and some girls. Table 3.7.4 presents the percentage of children playing two different types of games (which can be played online/offline), as well as any video game rated 18. **As can be seen, more than 80% of boys report they have**

**played these games rated 18 which have violence or adult themes.**

Table 3.7.4 Examples of games played by gender and FSM

%	Boys	Girls	Schools with less than 10% FSM	Schools with between 10% & 20% FSM	Schools with more than 20% FSM	All
Played 'Grand Theft Auto'	83	43	58	65	68	63
Played any video game rated 18	85	41	61	64	65	63
Played 'Call of Duty'	83	39	57	63	65	61

Q16efg: Please use tick boxes to indicate if you have (ever)....  
Base: All children; N=2081.

The findings confirm that more boys play these games than girls. Interestingly, the numbers of children playing these **was higher in schools with more than 20% of children receiving FSM than schools with less than 10% of children receiving FSM**. This suggests that children from schools with higher FSM **are not being disadvantaged in terms of access to social and entertainment activities, and parents are ensuring access to devices like game consoles.**

**Our qualitative interviews confirmed that playing games rated 18 and above appears to be a common practice.** For boys, gaming seems to be a dominantly social/ communication activity – to connect with friends. From Assassin's Creed, to Grand Theft Auto, from Steam and Twitch to Call of Duty (COD) and more.

The key elements in online gaming seem to be socialising with friends, enjoying the challenge, and learning from peers.

*Joe: "I'd say the most social thing I do is go on the Xbox. .... you play against everyone from around the world and your mates as well."*

Many also said they enjoyed playing app-based games on their own. One participant, Sophie, describes why she plays Temple Run: "*because it's fun, you can get better and better.*"

The game Minecraft was also reported as being very popular and enjoyed by boys and girls. Often the children would connect via Skype with friends when

playing a game such as Minecraft to chat about what to do and to team up with each other.

*Sophie (on Minecraft): "If you're in the same server, you have to survive, go to chests in the world...chat about what to do, team up with each other, and if one of us dies, you can be a spectator, look to see who's around, and see who's coming (and help the others survive)...it's fun, and you find chests, and take what you want from the chest".*

Gaming was also associated with learning new things. Many of the children interviewed who played online games, used YouTube heavily as a way to learn new tips and tricks for those games. This included subscribing to certain YouTube channels to get the latest advice.

Others had games to learn new skills directly:

*David: "I've got another game called Rock Smith which teaches you how to play the guitar, so that's why I also like the PlayStation."*

Some said they played games due to boredom, whilst others valued the release gaming can provide:

*Thomas: "If you've got aggression you can take it out on the missions on the games."*

Another practice highlighted from our interviews was the practice of 'mucking about' – a description for playing tricks on friends in an online game, for laughs.

*Adam: "On Clash of Clans the game, there's trophies, and you have to build up the trophies, but one of my friends, we decreased him by 500 trophies.... just funny sometimes to do it you know.... my friend was kinda annoyed."*

As we know 'mucking about' happens, it is important to distinguish such actions from incidents that genuinely upset and worry children.

### 3.7.5 CELEBRITIES AND YOUTUBERS

A number of the children interviewed reported following sports and celebrities online on Instagram, Facebook Pages, and Twitter including people who were 'Facebook famous'. Again, many of them were aware of how to distinguish between 'fan accounts' and real, verified celebrity accounts.

*Trudy: "(the) Internet is cool because you can see what famous people do....I sent a direct message on Instagram to Joey Essex. I just said 'I Love You' but I didn't get a reply.... I know it's the proper celebrity account cos it has a tick."*

Another child we interviewed, Nina, explained how she uses Twitter to follow stars such as Beyoncé, Rhianna and Nicki Minaj. She also follows 'inspirational quotes', 'girly quotes' or 'just girly things':

*"They share good stuff like 'Just be true to who you are' and stuff like that."*

### 3.7.6 VIDEO CHAT, EMAIL OTHER COMMUNICATION

From earlier findings, we know that 73% of children report using video chat programmes like Facetime, Skype, Oovo. Our interviews showed that children used these services to keep in contact with close friends and family.

*David: "I have an older friend in Australia and he Skypes me now and again."*

*Adam (on Skype): "I only use that with my cousins who stay overseas."*

Skype was used by some of the online gamers as well, whilst playing an online game:

*Evan: "It's a good way to communicate with your friends when you're playing online games...instead of having to type in - which takes forever."*

Children also communicate using the game console microphones. For example, Joe explained that if he got stuck on his homework he would speak to his friends on Xbox live:

*"I'd leave it on the dashboard so I am not playing any games so I'd just talk to them. It's like a mobile phone."*

Only a small number of participants used emails – in these cases to correspond with pen-friends/ family/ friends abroad. Overall, email appears to have a mainly administrative function e.g. it is used to set up an iTunes accounts/ social network/ gaming accounts. Some schools also allowed pupils to contact teachers via email, and this was the only other use, though again, this was not a common practice.

*Jay: "I never use email. I only have the email account to sign up to things....there's so much junk mail I can't be bothered anymore."*

Amongst our participants, there were mixed views on using the phone to make calls to friend. For most, phone calls were for family and close friends. They said they preferred to communicate with friends via text messaging (using Kik, BBM, iMessenger or normal texts). However, a few participants preferred phoning friends - as the simplest way of organising their social life, especially if a response was needed quickly.

### 3.7.7 DOWNLOADING AND APPROPRIATING MUSIC AND OTHER MEDIA

Some of the children interviewed knew how to use apps to download music and films that they would have otherwise had to pay for.

*Sophie: "Buying music costs but you can download them as files from YouTube on the PC."*

Similarly, some knew and used websites which streamed films, which they did not have to pay for. Many simply accessed their media legally via YouTube, iPlayer, Netflix subscriptions, and bought their music from iTunes using vouchers etc. In some cases, the children interviewed showed a deeper, more sophisticated understanding of how some services that facilitate illegal file sharing work. For example, Ryan, referring to Megashare which he uses quite often:

*"(The) root connection keeps changing, because they have to stay ahead of the Facebook... They're probably in a boat off the Russian Coast, streaming films out to people".*

Ryan also highlighted that he wouldn't use a peer-to-peer app:

*"You don't, because they can access your computer as much as they like, so there's no point downloading from them people."*

Others were simply matter of fact about using these services:

*Rose: "We get music, so it doesn't really matter whether it's legal or not."*

### 3.7.8 SOME OTHER PRACTICES

In our interviews, children also shed light on some of the social media practices of their peer group. For example, one practice was to share and broadcast 'usernames' from other social media platforms - with friends on Facebook.

*Clara: "Yes, they put 'Bored, Kik me' and put their name or 'BBM me' and they share their (user) name for BBM ...and Facetime and Skype etc."*

Another participant Nina, explained that sometimes friends would create content and ask for it to be promoted:

*Nina: "a friend raps... he asked me to share it ....even though he's only ok (not very good)".*

## 4 ONLINE SAFETY, RESILIENCE AND PRIVACY

This section presents our findings on a number of different aspects related to the online safety experiences of Year 9 pupils. It must be noted that our questionnaire only investigated a small number of themes related to negative and upsetting experiences – however, our qualitative interviews gave us a broader insight into these experiences.

The sub-sections are divided as follow: our findings on some negative and/or upsetting experiences children have online; the risky experiences they undertake; their knowledge of legal issues; their online safety practices and resilience online, explored through their strategies for safety, and how they respond to upsetting messages; and privacy online.

The data on negative and/ upsetting experiences, and risky experiences, is analysed further to see if there are differences between boys and girls, and those who use smartphones/ tablet monthly and less than monthly.

### 4.1 NEGATIVE AND/OR UPSETTING ONLINE EXPERIENCES BY GENDER

Table 4.1 shows the percentages of children who have had negative and/or upsetting experiences, by gender.

**Table 4.1 Negative and/or upsetting experiences by gender**

%	Boys	Girls	All
I receive junk emails	58	57	57
I get bad advertising pop-ups online	52	55	54
I have had a virus on my computer/ family computer	49	46	47
Seen anything online that upset you	35	55	45
Received rude or upsetting messages online	37	47	42
I have had my social network account hacked *	27	27	27

Yes responses to Q37a,c: Please indicate on each row if you have.. Q34a,b,c,f: Tick any of the following statements which apply to you.. Base: Users of related platforms: \*children who use at least one SNS; all others N=2081.

We can see that children are encountering a number of negative and/or upsetting experiences online. Overall a high number of children report receiving rude or upsetting messages (42%), or having seen online content that upset them (45%).

More girls than boys report ‘receiving rude and upsetting messages’ (47% vs 37%) and ‘seeing upsetting content online’ (55% vs 35%). Overall, this could be related to the fact that more girls are using social messaging and social networking platforms than boys, and are therefore more likely to receive or view upsetting content. It could also be that girls are traditionally more likely to be subject to non-physical, psychological bullying than boys (Bjtirkqvist, K., 1994) - which the Internet allows for more than traditional face-to-face bullying.

These experiences were echoed in our qualitative interviews, where **more girls than boys reported negative and upsetting experiences**. Some common themes also emerged from the qualitative interviews in relation to negative and upsetting experiences and these are highlighted below.

#### Inappropriate Messages

One common theme related to inappropriate messages that some pupils received from strangers on different social platforms. Here, Nina, shares her experience of using Kik, a social messaging service:

*"Weirdos can add you, like older people who can start messaging you things".*

Nina went on to explain that she has had people messaging "hey baby", and sometimes the messages were more explicit than that.

However the interviews also highlighted that the pupils had strategies in place to handle such situations, for example: not responding, blocking, or stopping their use of the particular social platform altogether.

#### Abusive Content

Another common theme related to abusive content and comments on some social platforms, particularly those that allowed people to be anonymous online. One participant, Emma, explained her experiences of using ‘Ask.fm’:

*"Lots of abuse on there – people ask questions... can either answer or deny it...I don't use it...I think its rubbish, pointless, waste of time."*

However several of the boys in the interviews mentioned that even though they often heard abusive comments whilst gaming online, they often saw this as banter rather than being *upsetting*. This may be the reason fewer boys than girls report encountering negative or upsetting content (Table 4.1).

*Adam: "They always like swear and all but we don't care – it's what happens – they make fun of each other...random people... sometimes friends mucking about...everyone does it online."*

### Violent Content

Violent content like animal cruelty was another theme that emerged from our interviews. One participant, Melissa, explained how she had seen upsetting videos of animals being mistreated, that had been posted on Facebook – they appeared in her feed due to being shared/promoted by wider audiences. Here she describes her experience:

*"I look at it for the first few seconds.. then I don't wanna touch it.. don't wanna see it...I scroll over it and leave it..."*

Another participant Trudy shared a similar experience:

*"They posted a video of a puppy being stood on. My mother and friend reported it."*

Other studies confirm that violent content is mentioned spontaneously, as upsetting, by children - more often than some other negative experiences that are of concern to adults (Livingstone et al., 2013).

### Aggression

Another common theme reported by boys related to feelings of aggression during gaming. For example, Joe, who plays games like Grand Theft Auto 5, FIFA explained that sometimes gamers got wound up, and this could lead to incidents of 'rage' and 'punching the pillow':

*"Go into a rage...everyone does...it's not really a big thing...they start to get really frustrated or annoyed."*

### eSecurity, scams and hacking

Although the overall numbers are quite high for eSecurity related experiences like having a virus (47%), receiving junk mail (57%), advertising pop-ups (54%) and having your social network account hacked (27%), a similar number of boys and girls report this.

These experiences were also shared in the qualitative interviews. For example, Trudy explained how a friend of hers had his account hacked:

*"Someone made another account pretending it was his, and was going on to people's photos and being horrible. It was exactly the same profile picture, but they spelt the second name wrong. I wondered, how have I got two of you? He then wrote it on his status saying 'I've been hacked too'."*

Another participant, Adam explained how scams and hacking happen in online gaming:

*"Sometimes if you play with someone they tell you 'oh, we'll swap accounts', like 'you go on my account, I'll go on your account' – when they go on your account, they take your bank details and things... happened to one of my friends."*

He continued:

*"I have been hacked on FIFA.... .. they just hack your FIFA money... I don't know how they hacked... it's quite hard."*

However it was also encouraging to hear that the pupils interviewed often took action to deal with the problems they encountered. For example, Adam got his brother to report the problem to Sony. He also changed his password. This theme is explored more fully in Section 4.6.

## **4.2 NEGATIVE AND/OR UPSETTING ONLINE EXPERIENCES BY SMARTPHONE/TABLET USE**

Table 4.2 compares the negative and/or upsetting experiences children have according to whether they use smartphones or tablets at least once a month or less than once a month.

**Table 4.2 Negative and/or upsetting experiences by monthly and less than monthly smartphone/tablet use**

%	Use smartphone/tablet at least once a month	Do not use smartphone/tablet at least monthly
I receive junk emails	59	39
I get bad advertising pop-ups online	54	46
I have had a virus on my computer/family computer	48	40
Seen anything online that upset you	46	37
Received rude or upsetting messages online	43	26
I have had my social network account hacked	22	15

Yes responses to Q37a,c: Please indicate on each row if you have..  
 Q34a,b,c,f: Tick any of the following statements which apply to you..  
 Base: Users of smartphone/tablet users at least monthly (N=1963); users not using smartphones/tablets at least monthly (N=118)

Mascheroni and Ólafsson (2014) have shown that children who use smartphones or tablets regularly are more likely to have upsetting experiences, as they generally undertake more activities.

Our findings are similar for the range of negative and upsetting experiences listed above – **i.e. more children who use smartphones/tablets at least once a month have negative/ upsetting experiences online experiences compared to children who use these devices less than once a month.**

This could be due to the fact that they undertake more online activities, which suggest that they may be more likely to encounter negative or upsetting content. Sometimes however, **the newer messaging apps themselves may be to blame.** Many children may have different perceptions of the intention or context of messages shared on certain platforms, so misunderstandings can occur more easily on social and group messaging platforms like BBM, where a ‘personal status’ (which all your contacts can see) can be misunderstood, or deliberately appropriated for misuse:

*Trudy: “When I had a Blackberry, it started lots and lots of arguments. You put a PM\* up and people think it’s about them.” (\*PM – a personal message equivalent to a Facebook status)*

*Elin: “I think BBM is really good but quite a lot of stirs caused up over it. There was a situation with my friend a few weeks ago – she was a victim and they put a PM*

*about her issue – like a broadcast. With my friend, it got sorted in end, but all the contacts saw the PM.”*

### 4.3 UNDERTAKING RISKY EXPERIENCES BY GENDER

Being an open environment, the Internet inherently presents risks – contact, content, commerce and conduct related risks (Hasebrink et al., 2009). We also know from other research that risks and opportunities online are related, so that the more children explore, the more likely they are to encounter risks (Livingstone & Helsper, 2010). Research has also shown that whilst ‘children who take up a wider range of online activities are likely to encounter more risks, they may also be better equipped to cope with those risks, becoming resilient to harm’ (Livingstone, Haddon & Görzig, 2012).

Our quantitative study sought to explore a small range of ‘risky activities’ children undertake, and to see if there were differences by gender, as well by use/non-use of smartphone/tablets at least once a month. Table 4.3 presents our findings by gender.

**Table 4.3 Risky activities undertaken by gender**

%	Boys	Girls	All
Played a video game rated 18	85	41	63
Installed an app to get music or videos which I would normally pay for - for free	58	59	59
Made friends with someone I did not know before, who I got to know online	39	34	37
Chatted, sent instant messages, emailed, or communicated with people I don’t know	38	34	36
Looked at stuff my parents wouldn’t want me to online	49	21	35
Posted updates, comments, photos, or videos that I later regretted sharing	28	31	29
Said something nasty to someone online (not as a joke)?	27	24	25
Made fun of, harassed, or messed with someone online	19	9	14
Shared my passwords to online accounts	13	7	10

Q19 b,c,e,f,i,j: Have you done any of these things? Q37: Those who answered yes to Q37b: Ever said anything nasty to someone online (not as a joke). Q35g: I have posted updates, comments, photos, or videos that I later regretted sharing. Q16g: Played any video game rated 18. Base: All children; N=2081.

From Table 4.3 we can see that children undertake a range of activities that adults might class as ‘risky’. Overall, boys lead girls in undertaking the risky activities listed above. This difference is notable for two activities in particular: **looking at content that their parents wouldn’t want them to online and**

**playing video games rated 18.** Girls are more likely than boys to post something they later regret.

Overall 10% of children report sharing their passwords, 36% of children report to have communicated with strangers and 37% say they have made friends with someone they did not know before. 25% of children have said something nasty to someone online.

The following example from one of our participants, Nina, illustrates how some risky activities develop when children have to manage these risky/ embarrassing experiences:

*“We were all talking and then some girl, she was like who do you think is good looking, blah blah... and I said... and she went and messaged the boy and he put up the message she sent him (using a screenshot)...saying what I said ....So I put a comment up about an embarrassing situation that happened to her... she was like ‘why did you put that up’... I said, ‘you embarrassed me so I embarrassed you’ ....She said she was really sorry and asked me to take it down. I told her she had to ask the boy to delete his post first, and then my comment would also get removed ...so she did, and the boy took it down.”*

#### 4.4 UNDERTAKING RISKY EXPERIENCES BY MONTHLY AND LESS THAN MONTHLY USE OF SMARTPHONES/ TABLETS

Table 4.4 presents our findings on the same range of ‘risky activities’ children undertake, but this time comparing results of children who use smartphones/tablets at least monthly or less than monthly.

**Our findings show that children who use a smartphone/tablet at least monthly are more likely to undertake all the risky activities listed above, compared to children who use these devices less than once a month.**

Whilst our quantitative questionnaire only looked at a narrow range of risky activities, and did not for example, explore the issue of sexting directly, our qualitative interviews highlighted that these incidents did happen.

**Table 4.4: Risky activities undertaken by monthly and less than monthly smartphone/tablet user**

%	Use smartphone/ tablet at least once a month	Do not use smartphone/ tablet at least monthly
<b>Played a video game rated 18</b>	64	54
<b>Installed an app to get music or videos which I would normally pay for - for free</b>	60	31
<b>Chatted, sent instant messages, emailed, or communicated with people I don't know</b>	37	23
<b>Made friends with someone I did not know before, who I got to know online</b>	37	31
<b>Looked at stuff my parents wouldn't want me to online</b>	36	28
<b>Posted updates, comments, photos, or videos that I later regretted sharing</b>	30	19
<b>Said something nasty to someone online (not as a joke)?</b>	26	18
<b>Made fun of, harassed, or messed with someone online</b>	14	10
<b>Shared my passwords to online accounts</b>	10	5

Q19 b,c,e,f,i,j: Have you done any of these things? Q37: Those who answered yes to Q37b: Ever said anything nasty to someone online (not as a joke). Q35g: I have posted updates, comments, photos, or videos that I later regretted sharing. Q16g: Played any video game rated 18. Base: All children; N=2081.

For example, one participant, Joe, explained that he knew of ‘dodgy’ photos being shared on social messaging app Kik, which is only available on smartphones and tablets:

*“It’s meant to be only one person but sometimes people make fake accounts and then send it around.”*

Another participant Clara shared a similar story:

*“One of the people in the class took a picture of his private parts and sent it to everyone and shared it. Everyone knew about it... My friends spoke about it and we laughed...I don’t know if the school got involved.”*

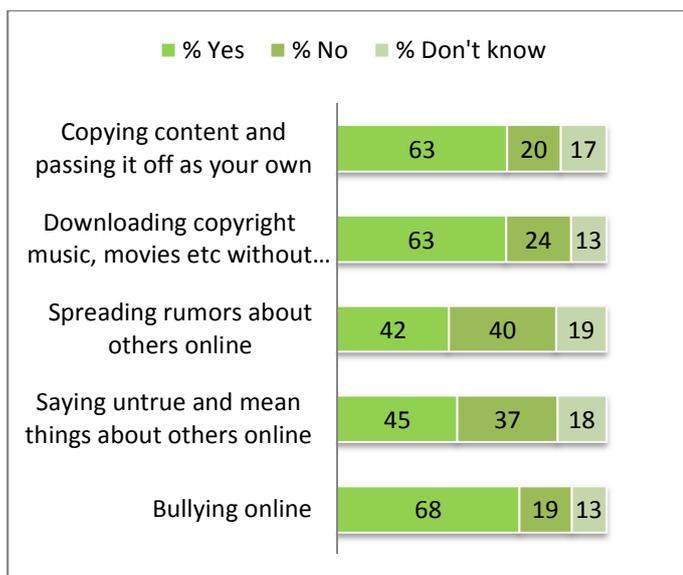
Taking and sharing personal photos online is a lot easier to do with smartphones compared to other devices and therefore it is not a surprise that children who use smartphones are more likely to engage in some risky activities.

#### 4.5 KNOWLEDGE OF LEGAL ISSUES

It is important to know how much children understand about the law as it applies to online activities, so that educational programmes can address this if necessary. Figure 4.5 presents our

findings on children’s awareness of legal matters related to online actions.

**Figure 4.5 Children’s awareness of legal matters related to online actions**



Q36: Please indicate for each of the topics on the row below, if you think people can be prosecuted (i.e. get a fine or be jailed) for... Base: All children; N=2081.

The spread of answers in Figure 4.5 suggests that at least 30% of children are still uncertain, or do not know if certain actions are prosecutable. Overall awareness about bullying being a prosecutable offence is relative high (68%) compared to other topics, suggesting the efficacy of many anti-bullying awareness programmes.

## 4.6 ONLINE SAFETY AND RESILIENCE

In recent years, several researchers have highlighted the importance of developing children’s online resilience as a way of empowering them to handle risks online, and to limit the likelihood of risk migrating to harm (Byron Report, 2008; d’Haenens et al., 2013; Przybylski et al., 2014). In this report, we define ‘online resilience’ using Przybylski’s description, as: ‘an individual’s ability to accurately adapt to changing and sometimes stressful environments and to feel empowered to act instead of react in the face of both novel and threatening challenges’.

In their work, d’Haenens et al., (2013) provide several recommendations to help children improve their online resilience, some of which recommend teaching children how to use proactive (problem solving) strategies.

In the following sub-sections, we explore children’s strategies for keeping safe online, as well as their responses to really upsetting content, and explore how many will also challenge negative actions online. This will provide insights into on how resilient children are.

### 4.6.1 ONLINE STRATEGIES FOR SAFETY

Table 4.6.1a presents the strategies children use to keep themselves safe online, by gender.

**Table 4.6.1a How children keep themselves safe**

%	Boys	Girls	All
I see arguments online but I don't get involved *	79	83	81
I block some people from contacting me *	74	80	77
I am careful who I add on my friend/contact list *	70	80	75
I use privacy settings on my social network and other accounts *	67	76	71
I keep my business to myself	53	60	57
I use the mute function on a game **	54	42	48
I take screen shots of stuff as evidence	39	55	47
I take screen shots of stuff to show my friends to get their advice and support	29	47	38
I argue back	35	31	33

Q39: How do you manage your own online safety? Tick all the statements that are true; Base: Users of related platforms: \*children who use at least one SNS; \*\* children who game online; all other questions : N=2081.

In this report, we have grouped the strategies that children use into the following categories: **social proactive strategies, functional proactive strategies and passive strategies**. These are discussed below:

#### Social proactive strategies

**We have classed social proactive strategies as actions or communication children undertake to address an issue, for example: using privacy settings, blocking, and practising self-censorship, taking screen shots as evidence, or to share with friends for advice.**

Table 4.6.1a shows that girls lead boys in **social proactive strategies** that involve use of social networking or social messaging platforms like blocking someone from contacting them (80% vs 74%); taking care when adding contacts (80% vs 70%); and using privacy settings (76% vs 67%).

More boys than girls (54% vs 42%) report using the mute function in a game as a safety strategy. Boys are also more likely than girls to argue back.

Girls are more likely than boys to take a screen shot as evidence (55% vs 39%) or take a screen shot to show their friends to get their advice and support (47% vs boys 29%).

**Our qualitative interviews confirmed that children use a variety of strategies to keep themselves safe. A few of these different social proactive strategies are shared below.**

The first two examples showcase children getting help from their peers. In the first example, Trudy, explains how she got her friends to help her decide if someone was trustworthy on Facebook:

*"There was a hacker on Facebook and she literally messaged everyone. I just screen shotted her photo on Facebook and said 'who is this' and 'does anyone know her'- about 40 people commented on my photo saying 'she has done this to me too'... No one emailed her back. I thought it was just me at first and I was frightened."*

Another participant, Nina, explains she got her peer group's help to deal with a boy who messaged her on Kik, saying he liked her:

*"I invited my friends to sort of help me...I added them to the chat so they could see what he was saying....we argued with him ...then we all blocked him."*

The following two examples showcase how children controlled access to their content:

*"I made myself private (on Instagram), so that I don't get any weirdos following me."*

Another, from an open-ended answer from our questionnaire, had a similar strategy:

*"I block certain people so my friends can see (my information like posts etc.), but the people I do not like can't"*

Another strategy was to self-censor/ not participate online:

*Sally: "Sometimes I don't put something up because you can get paranoid...because of the comments you get, you really have to think twice before posting."*

Children also showed interesting strategies for handling new contact requests on social messaging apps, or on platforms like Instagram.

*Sally: "I accept them if I've heard their name, but if they don't text me I'll just delete them then."*

*Nina: "If they're older I won't let them follow me, or if they are my age or I know of them, then I'll let them follow me." (referring to her private Instagram profile which has 580 followers)*

Another girl from a group interview explains how she handled unwanted contact:

*"Some people have sent some really weird messages (such as 'You beautiful...'), so I blocked them."*

Others, like Sharon, actively choose not to engage on certain platforms like 'Ask.FM':

*"I don't like the concept of it...I tried to stay away from it."*

Others again preferred private mediation. For example, Ryan explained that he would private message someone to resolve a potential issue rather than expose it publicly:

*"You wouldn't want their life ruined."*

Other social proactive actions children shared in our interviews, that are not mentioned above, include: leaving group conversations that they didn't want to get involved in; turning off their phones, to allow themselves space to 'cool off'; asking friends to take down photos; and saving chat logs.

Our questionnaire also provided the opportunity for children to input other strategies they had for keeping themselves safe. The findings confirmed similar proactive strategies as our qualitative interviews and quantitative results. Three examples of these open-ended entries are presented below:

*"I'd try to calm someone down but if that wouldn't work and they started to like 'verbal abuse me' I'd argue back or walk away."*

*"Sometimes I kick them from the game if someone annoys me."*

*"Tell a teacher in school so they can help me and deal with it."*

## Functional proactive strategies

We class **functional proactive strategies** as the use of ‘e-security’ software or actions like ‘reporting abuse’ that children use. Table 4.6.1b presents our findings on these strategies.

**Table 4.6.1b Children’s e-security and reporting actions to keep themselves safe**

%	Boys	Girls	All
I have installed an anti-virus program/ app *	61	49	55
I have installed an anti-spyware filtering program/ app *	43	27	35
I have made an online report about something I do not like **	28	29	28

Q34d,e,h: Tick any of the following statements which apply to you. Base: Users of related platforms: \* children who use at least one of the following: pc/ laptop/ smartphone/ tablet; \*\*children who use at least one SNS;

From Table 4.6.1b, we can see that more boys than girls report installing e-security programmes like anti-virus/ anti-spyware programmes or apps. An almost equal percentage of boys and girls – 28%, 29% say that they have made online reports about something they do not like.

One of our participants, Sophie, gave us an example of making such reports, when she was playing Call of Duty Black Ops:

*“It’s funny when they get annoyed with you... I killed them, then they swore on their microphones, so I reported them...that happened once...I mute them now.”*

## Other functional proactive strategies

Our qualitative interviews showcased a number of other functional proactive strategies. One participant, Sharon, who used Kik’s HeyHey ‘app within an app’, chose to remove that feature after a while, giving the following reason:

*“Some of the pictures people used to put on there used to make me feel a bit uncomfortable because sometimes they were too revealing or very depressing in a way...I am going to kill myself or stuff like that...I decided to just cut that out.”*

## 4.6.2 RESPONSES TO REALLY UPSETTING CONTENT

Another way of exploring resilience is to look at what actions children undertake when they encounter content they find really upsetting. Table 4.6.2 presents what children do when they receive really upsetting messages online.

**Table 4.6.2 Actions children will take if they receive really upsetting messages online**

%	Boys	Girls	All
Block the sender of the message	63	69	66
Tell my parent(s) or carer(s)	48	61	55
Tell my friends	39	55	47
Report it to the site or platform that provided the service	46	43	45
Tell another family member	31	34	33
Leave the website/ stop using the service/ game	25	27	26
Do nothing	14	9	11
Speak to a mentor on the BeatBullying website	11	8	10
Call Childline	9	6	7

Q38: What would you do if you received really upsetting messages on your mobile phone, via email, whilst playing a game online or whilst using a messenger or social networking service? (Tick all the answers that apply). Base: All children; N=2081.

Overall, the main action children say they will take (based on the list above) is to ‘block the sender’ (66%). There are notable differences in two key actions: **more girls than boys will tell their parents or carers (61% vs 48%), and more girls than boys will tell their friends (55% vs 39%)**. Overall more than 50% of children will tell their parents or carers and 45% also say they will ‘report it to the service provider’ (compared to an earlier figure of 28% of children reporting *they have already reported* something online that they did not like).

Seeking help from friends and family was also a theme that was highlighted in the qualitative interviews.

One participant, Nicky, highlighted how she sought family support when something bad happened to her:

*“Last year, I had this man text me .... harass me for stuff and I told the police, and he got arrested....was in the newspaper....Basically I told my nan, she told my mum .....they phoned the police...the man got arrested.”*

Another, Tara, spoke to her mother about an incident, and her mother contacted the school:

*“In year 7 there were some rude stuff going on (with someone in school) - on BBM - so my mum reported it to the school. It was some offensive language. It wasn't directed to me.”*

### Passive Strategies

**In this report, we class passive strategies as children ignoring a situation, doing nothing or stopping use of a service, for example, going offline when threatened.**

From Table 4.6.2, we can see that overall, 11% of children report they will do nothing, with boys leading girls in this (14% vs 9%). 26% of children say they will leave the website/ stop using the service/ game. **However, unlike doing nothing however, it may be that the act of ‘taking time out’ may be a protective and positive strategy. Much depends on the actual situations as well as how children view these strategies themselves.**

The following example from Ryan, who has received malicious messages, which he ignores, illustrates how he views ‘ignoring’ as a positive strategy.

*Ryan: “It's important people know they've got the power to switch it off... with cyber bullying some people think they have to stay on there, and they don't know when to leave the virtual world.”*

### 4.6.3 SPEAKING OUT

Table 4.6.3 explores if children have ever spoken out or challenged mean comments online. More boys than girls say they have. However, more than 20% said they were not sure – this could be due to the children not fully understanding what was meant by the word ‘challenging’ in the questionnaire.

**Table 4.6.3 Children’s responses to whether they have ever challenged mean comments by others online**

%	Boys	Girls	All
<b>Yes</b>	40	33	36
<b>No</b>	38	38	38
<b>Not sure</b>	22	29	26

Q40: Some people say mean things online. Have you ever spoken out or challenged this kind of behaviour (publicly or privately)? Select yes, no or not sure. Base: All children; N=2081.

### Overall Resilience

In general children appear to have a mixed range of proactive strategies to keep themselves safe online, with more than 70% listing four social proactive actions. More than 50% of children listed five of the nine proactive actions listed in Table 4.6.1a.

From Table 4.6.1b, we also see that more than half the children report that they have installed anti-virus programmes/ apps, and at least a quarter of them have made an online report about something they do not like.

When asking children what they would do if they received a really upsetting message online, 66% said they would ‘block the sender’ (66%), and overall, more than 50% of children will tell their parents or carers and 45% also say they will ‘report it to the service provider’. 11% report they would do nothing.

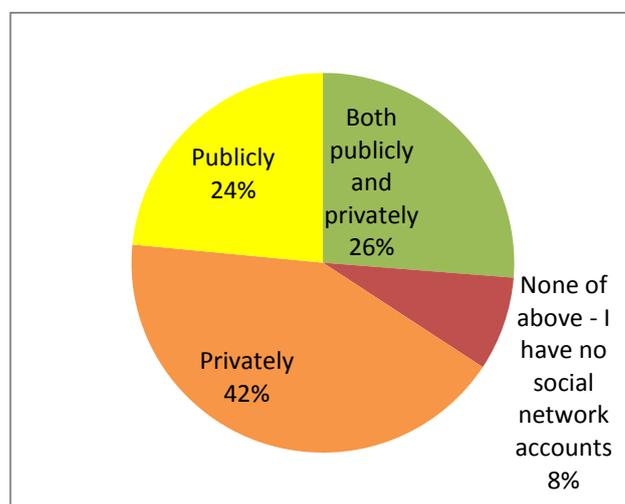
As resilience is related to having a number of reliable coping strategies, we can infer that children are fairly resilient. This was also confirmed by many of our qualitative interviews, which gave us insights into the many nuanced ways in which children keep themselves safe and respond to risk online.

### 4.7 PRIVACY ONLINE

In this sub-section, we first present our findings on the privacy settings children use on social networking sites, and follow this with findings from our qualitative interviews on how children view, understand and manage their privacy online.

Figure 4.7 shows the privacy settings used by children on SNS, if they have them.

**Figure 4.7 The privacy settings used by children online.**



**Q18: When you post status updates on a social networking site (e.g. Facebook, Twitter, Instagram etc.), do you do this publicly or privately (i.e. only visible to certain people like friends) OR both publicly and privately (choose one option). Base: All children; N=2081.**

42% of children report being private on social networking platforms. However, 50% of children (24% plus 26%) report either posting publicly or post a mixture of public and private posts.

This is interesting given that previous results from Table 4.6.1a report that 71% of children say they use privacy settings as a means of keeping themselves safe. **Clearly using privacy settings is not the same as being completely private online.**

From our qualitative interviews we saw that children valued their privacy. We also gained insights into how children manage their privacy online:

*Melissa: "If someone said 'do you know this person' then the first thing you'd do is go onto Facebook to find out about them. So my Facebook is private."*

Participants appear to be able to make choices about what they wanted to disclose and to whom. **However, there was sometimes an inconsistency in their practices, and this raises questions on just how much children understand about their own privacy.**

For example, one of the participants, Nina, discussed a video montage she had made which she shared on Instagram, Twitter and Facebook. She said she was happy to share the montage because her Instagram is private, her Facebook account is restricted to family and friends, and on Twitter, where she has a public profile, she said:

*"I don't have that many followers on there so I don't really care".*

**This statement, 'I don't really care' highlights an issue that requires further investigation. Why would young people take care to share privately on some platforms, and on others, share openly? How much do they understand about their own privacy, and the idea that unknown audiences could view their content, and would they care? (as Twitter is a public forum, if one's account is public). All these points require further investigation.**

From the interviews, quite a number of the children report searching online to find out what is available publicly about them and others.

*Mary: "In school everyone always Googles themselves and their parents and teachers."*

There was a varied response in terms of understanding what information would be found, with some thinking their Facebook photos might be displayed automatically, whilst others were quite confident that nothing could be found. **This again demonstrates a deeper need to understand the workings of the Internet, and how search engines work, and how content (photos etc.) are indexed by search engines.** There was also a mixed response to whether they would be comfortable with the idea that others could search for them online.

*Interviewer: Have you ever Googled yourself? Thomas, "No, I don't really care if people say stuff about me."*

However, the interviews showed that privacy was important to Thomas - he never shared any personal updates and expressed a concern about the fact that the name of his school is in his profile and that someone could turn up at school and ask for him by name.

It is also important to note that not everyone was interested in uploading photos online, and some were also mindful of issues of etiquette and consent.

*Joanna: "I don't particularly want pictures of me everywhere. I think if I've got a photo with my friend it might be rude to upload it without asking them first."*

*Interviewer: "Would you always ask first?" Joanna: "Yeah".*

One participant, Sam, also expressed concern about the privacy practices of some companies, and was not clear how these worked. He said he did not want an Xbox because he feels that it monitors his behaviour.

*Sam: "It sort of watches you. So if the Xbox was there and I was kicking the ball around...then it will start advertising football stuff and I don't like that at all...I find that quite creepy to be honest."*

## 5 PARENTAL MEDIATION

This section presents findings related to how children perceive their parents' involvement in their Internet use. As we know from Section 2, children's main place of Internet use is their home, with their bedroom as the main place of access. Most children also report that they go online using their personal and portable devices like smartphones and tablets, or their game consoles. This makes potential parental involvement and supervision of children's Internet use much harder. Furthermore, at age 13 and 14, children are at a transitional phase of development where privacy often becomes more important. This also creates challenges for parents, which is why parental communication, and an active, supportive home environment are key.

This section is split into sub-sections covering general parental mediation in the home; parental mediation involving social media and messaging; privacy from parents; parental technical mediation; parental trust; parental perception; parental digital awareness and competency; and parental involvement.

### 5.1 GENERAL PARENTAL INTERNET MEDIATION IN THE HOME

In this sub-section, we present our findings on how parents mediate their children's Internet access and safety, as reported by their children. **It must be noted that we did not interview or survey parents directly and this might underestimate parental regulation**, as shown in other studies (Duerager & Livingstone, 2012).

Parents appear to have mixed strategies, and the qualitative interviews gave us an insight into what these were, as reported by their children. It appears that parental mediation depends on a number of factors including the parent-child relationship dynamic, the perceived vulnerability of the child and parents' own digital competency.

Table 5.1 shows the quantitative findings with regards to parents' general mediation related to their children's Internet use.

Overall, at least 50% of children report that their parents have provided support and advice to help them use the Internet safely. For example, 74% of children say their parents have spoken to them about

not sharing personal information, and 68% say their parents help them when something is difficult to do or find online. The least common mediation strategy appears to be time restriction with only 38% of children reporting this.

**Table 5.1 Children's reports of parents' general mediation of their Internet use**

%	Boys	Girls	All
<b>Safety focus</b>			
Not sharing your passwords or personal information online	67	80	74
Suggested ways to behave to other people online	58	69	64
Suggested ways to use the Internet safely	56	63	60
Talked to you about what to do if something on the Internet ever bothered you	47	65	56
What's ok to post online (photos, videos, comments, etc.)	51	61	56
Which types of social media, websites and apps you are allowed to use	50	56	53
Helped you in the past when something has bothered you on the Internet	40	59	50
<b>General parenting/ ethical</b>			
Helped you when something is difficult to do or find online	65	72	68
Not using devices like mobile phones to cheat on school work	43	47	45
Downloading songs or movies illegally	40	43	41
How much time (or specific times) you are allowed to go online or use your mobile phone	41	36	38
<b>Information literacy</b>			
Explained why some websites are good or bad	60	67	64
How people or information online might be biased/ not trustworthy	52	60	56
How online content can be copied and pasted and used in ways you might not intend	45	48	46

Yes responses to Q22, 23: Using the tick boxes, on each row, please indicate if your parent(s)/ carer(s) have.../ spoken to you about... (Select yes, no, not sure). Base: All children; N=2081.

Interestingly, more girls than boys report Internet related parental mediation (**which could be restrictive, advisory or supportive**) on themes related to safety, parenting, ethics or information literacy. The one exception was the theme related to the 'amount of time children are allowed online or on their mobiles.' Here the figure for boys is greater than girls (41% vs 36%). As boys go online on games more than girls, this suggests that **some parents are**

**restricting online gaming time**, as verified by some of the qualitative interviews.

It is also worth noting that although some parents set time limits on their children's daily Internet use, children often find their own solutions to this. For example, Joseph, who mainly lives with his mum and stepdad, explained that he was only allowed two hours every day in the evening. Therefore he wakes up early to catch up on YouTube videos etc., so this doesn't affect his evening allowance.

More girls than boys report that their parents mediate the 'types of social media, websites and apps they are allowed to use' (56% vs. 50%), and 'what's ok to post online' (61% vs. 51%), with both sets of figures being quite high. This was supported by the findings from the qualitative interviews which showcased several approaches that parents used to mediate their children's Internet use.

For example, **some parents were friends with their children on SNS** like Facebook, whilst some relied on siblings and family members to keep an eye on their children:

*Nick: "basically my brother is on Facebook so he can look after me."*

One of the participants, Melissa, explained that whilst her parents didn't insist on 'friending' her on Facebook, her mum had told the wider family and they had all added her. However, Melissa said that she didn't mind this:

*"It's more public, and I don't really use it so I can have my family on there and can see what they're saying."*

Another common parental strategy described by the children we interviewed was **for the parents to have their children's passwords**. For example, Clara, who is friends with her mother on Facebook said:

*"They said you can have Facebook 'as long as we know your password'. They can see if someone is being mean to me, they could go on my account and stop me talking to them and keep an eye on me on it."*

A few parents applied **more restrictive mediation**. Insights from the interviews with children suggested this could be due to their fears and perceptions of risk and harm, through the negative experiences of other children (in their families, or whom they hear about through the media).

*Clara: "My mum won't let me have Snapchat. I don't know if I want it though. She said to me: 'If I find out you have that I'll take your iPod off you straight away', because apparently people say rude things on there."*

*Mary: "In our old house my sister and I weren't allowed to go on YouTube because it used all the Internet. So my mum's partner blocked everything that had the word YouTube in it.....they both want me to be safe."*

When another participant, Tara, was responding to whether she had tried Twitter, she said:

*"No, I don't go behind my parent's backs....I'd ask them first and say 'am I allowed this'."*

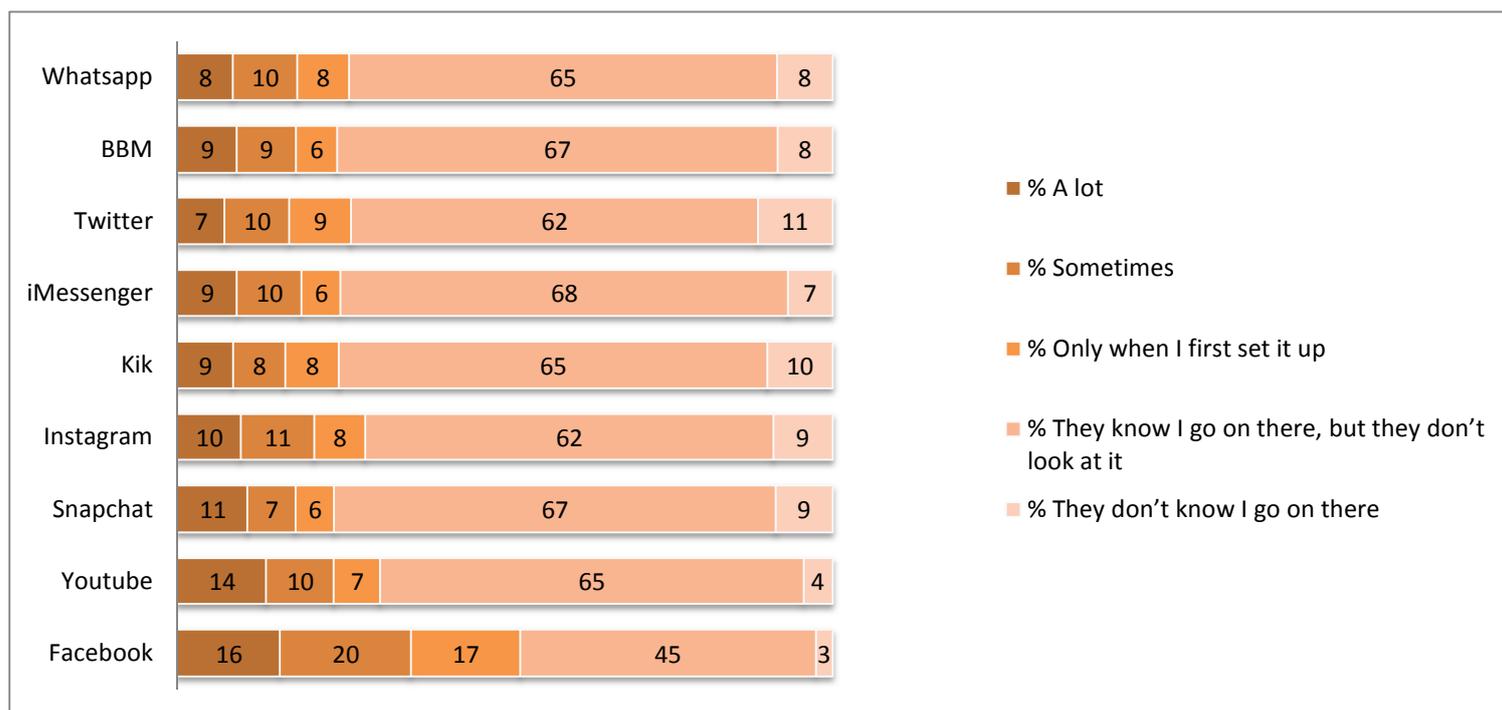
In terms of providing support, higher numbers of girls than boys report receiving 'help from their parents in the past when something has bothered them on the Internet' (59% vs. 40%), and advice on what to do if something on the Internet bothered them (65% vs. 47%).

## 5.2 PARENTAL MEDIATION INVOLVING SOCIAL MEDIA AND MESSAGING

Some of the most common daily activities of children involve the use of social media messaging and social networking platforms. Figure 5.2 explores how actively parents are monitoring their children's use of these platforms, and compares this across different platforms.

Overall, there is not a big difference in the numbers of children who report that their parents check their use of social platforms, suggesting that **parents who are concerned, are concerned more equally across platforms**. However, of the parents who check 'sometimes', Facebook appears to be the main platform that is checked. This may be attributed to more parents' general awareness of Facebook as a popular social network platform (it has been around longer than the other platforms), as well as the fact that Facebook has been implicated in media stories relating to online safety. If we add the numbers of children reporting 'any monitoring at all' of a social platform by their parents, then the numbers are largest for children using Facebook (52%).

**Figure 5.2 Levels of parental monitoring mediation by different social network and social messaging platforms**



Q20: Do your parent(s)/ carer(s) ask to check your use of the following services? Please tick the appropriate answer on each row: A lot; Sometimes; Only when I first set it up; They know I go on there, but they don't look at it; They don't know I go on there; I don't have an account/ my account is inactive. Base: Users of the platform.

Overall, children using newer platforms like Kik, Snapchat, Twitter and Instagram report lower levels of parental monitoring mediation than Facebook: Snapchat (24%), Instagram (29%), Kik (25%), Twitter (26%), and BBM (24%).

These findings support our qualitative findings that **many children feel their parents are lagging behind them in their awareness of some of these platforms.**

It is interesting that **more than 60% of children who use these newer platforms (apart from Facebook) say their parents are aware they use these platforms, but do not monitor them.** This could be attributed to parental trust (discussed later in Section 5.6) or a lack of awareness of the social networking features, of the platforms or how similar they are to platforms like Facebook.

It is noteworthy that approximately **10% of children report that their parents do not know they go on platforms like Snapchat, Twitter, Instagram and Kik.**

### 5.3 PRIVACY FROM PARENTS

Our interviews show that children have mixed views about whether they want privacy from their parents

in relation to their use of SNS like Facebook. Some expressed a need for privacy whilst others, who said

they had nothing to hide from their parents, were less bothered.

For example, one participant, Ryan, said that he had been considering opening another account to use with his friends as felt he had no privacy due to family security concerns:

*"There's always an extra pair of eyes looking at you, so you've got to think twice."*

Whereas another participant, Mary, felt more relaxed about it:

*"My mum never checks Instagram or whatever...she says 'you have your private life, and I have mine', which gives us our own privacy, which is good."*

A few children from the group interviews described that they had to be friends with their parents in order for them to be able to have Facebook accounts, **but they didn't like this.** One girl expressed a shared view:

*"She's my mum and I don't want her to see my business."*

When the group participants were asked 'if there was anything you do online that you don't want your parents to see', two examples of comments shared were:

*"Sometimes, arguments."*

*“You can’t say anything nasty (on Facebook) as your parents will start saying ‘why are you swearing’, and commenting like ‘less of the swearing’.”*

## 5.4 PARENTAL TECHNICAL MEDIATION

Table 5.4 shares children’s reports of the different technical mediation solutions that their parents use to manage their Internet use.

**Table 5.4 Children’s reports of their parents’ technical mediation solutions**

% Children who believe their parents use:	
Software to prevent viruses/ spyware / advertising pop-ups.	41
Parental control software that filter some types of websites	21
Parental control software that keeps a track of websites you	12
A service that limits the amount of time you spend online	7
None of the above	46

Q25: As far as you know, on the device that you use the most at home (e.g. laptop / smartphone/ game console etc.) - do your parent(s)/ carer(s) make use of any of the following: (please tick all the answers that apply to you). Base: All children; N=2081

It is noteworthy that according to their children, **almost half of parents (46%) employ no technical mediation (filtering software, monitoring or time-limiting software)**. 12% claim their parents have monitoring software that tracks websites visited, and 21% claim their parents have restrictive filters. Overall this is not a high figure. Also, the figure for anti-virus/spyware use as reported by children is 41%. Given that children highlighted advertising pop-ups and security threats like viruses as key issues (Section 4.1), **parents could be encouraged to use more e-security software.**

These quantitative findings were supported by findings from the qualitative interviews. We also gained an insight into children’s views of these technical mediation solutions, and several reported frustration.

For example, when one of the participants Mary, was asked if her parents had installed any security software or filters, she said:

*“I have a family safety thing on there, so nothing bad comes up. If a virus or pop-up comes up I can block it. I have to request to view certain sites.”*

Mary then went on to give more details:

*Mary: “My mum’s partner can see what I go on... mostly the apps that I’m using. It’s quite annoying if you restart it (the computer) you have to request to use the camera and stuff like that.”*

Another participant, Ryan, explains his parent’s use of filtering software on his computer and his attitude towards it:

*“My parents have applied a Windows ‘family safety settings’ filter and it’s annoying.” (Ryan’s step father works in IT)*

As a consequence, YouTube is blocked on his account. **Ryan explained that his mum has given him her pass code and he just uses that.**

**This highlights the inconsistencies in parental mediation solutions, and reflects parent’s own struggles with finding appropriate solutions.**

## 5.5 PARENTAL TRUST

We also investigated the views of children who said their parents provided limited mediation (i.e. they did not mediate in at least three aspects of their Internet use) - by asking them the most likely reasons (provided as a series of choices). Table 5.5 presents our findings.

**Table 5.5 Children’s reasons for their parents’ non-mediation**

% Children who provide the following reasons for their parents' non-mediation of their Internet use:	
<b>They trust me</b>	66
I’m old enough to know what I’m doing	61
They have taught me how to use the Internet in a responsible way	31
They don’t know how to use the technology	16
They can’t always keep track of what I’m doing	10
They were tired of arguing with me about my Internet use	6

Q24: Responses from children who answered “No” to three or more statements in Q23: Why do you think they haven’t talked with you about those things? Multiple selections allowed. Base: N=1152.

**The main reasons children give for their parents non-mediating is trust (66%).** Another reason is that they are old enough to know what they are doing (61%). It is important **to note that 16% of children say the reason is ‘because they did not know how to use the technology’.**

Our qualitative findings also highlighted parental trust as an important factor for lower parental mediation:

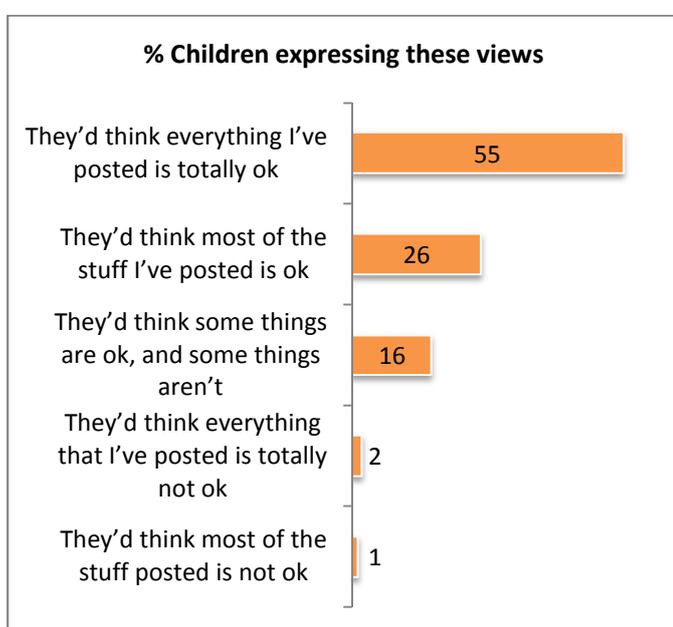
*Joanna: "I think I'm generally trusted to use it (the Internet) by myself."*

*Nick: "They trust us...they trust what school has taught us as well....we don't talk to strangers."*

## 5.6 PARENTAL PERCEPTION OF CHILDREN'S ACTIVITIES

We wanted to investigate what children thought their parents/carers would think about what they did online - if they knew everything they were doing. Figure 5.6 presents our findings.

**Figure 5.6 Children's views of what their parents would think of their Internet use and posts online.**



Responses from Q21: What do you think your parent(s)/ carer(s) would think about what you do on the internet and post online (the photos, comments, or other stuff you've posted) – if they knew about everything you were doing? Base: All children; N=2081.

**It is noteworthy that the majority of children (55%) feel their parents would approve of their Internet use and posts, whilst 26% think they would approve of most of their posts and Internet use. 16% think their parents may have mixed views, suggesting that children may be undertaking activities that could be embarrassing or risky (the latter in terms of inappropriate interactions/ exchanges, or accessing inappropriate content). It is noteworthy that only 3% of children thought their parents would not approve of most or all of their interactions.**

**When considering these findings it is important that we do not confuse the behaviour of children undertaking risky behaviour that they may want to hide from their family members, with children who may express themselves in ways that perhaps their parents may not approve of, for self-expression, to socialise, or fit in with their peer group. These are important aspects of children's socialisation online. Therefore we should not assume that children who say their parents may not approve of their posts/ Internet use- are necessarily undertaking what adults may consider risky behaviour. The quotes below, from our interviews, highlight children's natural desire for privacy, and the fear of being judged or misunderstood by their parents.**

*Tara: "I am embarrassed if they saw stuff of me...like a selfie...Mum will say 'what is this?'"*

*Rob: "I don't really like them seeing my Facebook page ... it makes me feel uncomfortable – especially when considering other people's status updates coming up on my page. I wouldn't want them to think that that is something to do with me."*

## 5.7 PARENTAL DIGITAL AWARENESS AND COMPETENCY

Our interviews gave us insights into the challenges some parents face navigating and parenting in this new media ecology. Technologies have evolved very quickly in recent years and parents are not always up to date with the newer platforms and messaging services that children use, for example Kik and Instagram. Consequently, as highlighted in Section 5.2, **they may only have rules or guidance about more well-known platforms such as Facebook.**

The experience of one of our participants, Eve, highlights this issue. She describes her use of Instagram for sharing funny photos taken with her friends during sleepovers:

*"We don't really care what people think because we are ourselves."*

When asked by the interviewer if her parents ever see them, she says:

*"No, cos my parents are not technology people, not at all. My parents are on Facebook, but I don't go on Facebook, so they don't see that."*

Parent’s knowledge and experience of certain platforms/ lack thereof also has a clear bearing on how able they are to help children set up their social media accounts with appropriate levels of privacy.

One of the participants, Joanna, highlighted this issue, when she showed us her Facebook account **where her default privacy setting was found to be set to ‘friends of friends’, when they thought it was set to friend’s only:**

*“Mum and dad set up my (Facebook) account for me....I had never used it before and wasn’t sure what it was about.”*

It also appears that **some parents are unsure of what restrictions (time or otherwise) to have, if any:**

*Rhodri : “no rules....apart from don’t turn the sound up too loud.”*

Rhodri explained that his mum used to have a setting that switched the Internet connection off at 9pm, but that setting didn’t work on his PC.

Another participant, Joseph, like a number of participants, said **his parents never really had a discussion with him about Internet use or the appropriateness of different games:**

*“They (mum and step-dad) weren’t really happy when I got Grand Theft Auto 5 .... but they haven’t really stopped me from playing it or anything...It’s an 18...it’s about killing people.”*

## 5.8 PARENTAL INVOLVEMENT

Table 5.8 presents children’s views of their parents’ involvement in their Internet use, and whether they would like their parents to be more or less involved.

Encouragingly, more than 70% of children report being satisfied with their parent’s level of involvement in their Internet use. 13% (7%+6%) of children wanted less involvement from their parents. 4% (3%+1%) of children sought more involvement.

**Table 5.8 Levels of parental involvement desired by children**

%	
I am happy with the level of my parents/carers involvement in my Internet use	71
I am not sure	12
I would like my parents/carers to be A LITTLE LESS involved in my Internet use	7
I would like my parents/carers to be A LOT LESS involved in in my Internet use	6
I would like my parents/carers to be A LITTLE MORE involved in my Internet use	3
I would like my parents/carers to be A LOT MORE involved in in my Internet use	1

**Q26: Overall would you like your parent(s)/ carer(s) to take more or less interest in what you do on the Internet, or to stay about the same pick the statement below that is most true for you. Base: All children; N=2081.**

The qualitative interviews showed us that **many children still turn to their parents for support and homework help – however they didn’t want their parents to be too controlling or too involved in their Internet use.**

One of the participants, Sophie, provides a typical example of feedback given during the interviews. She says that she has never had discussions with her parents regarding her online activity (apart from her dad telling her not to go on Google Chrome because he believed it slows the PC down). She went on to explain that if she was gaming, her father would sometimes say: “off the computer now”. Otherwise there were no filters. When asked about her dad’s understanding about online activity, she rated it as 5 out of 10. **She says she wouldn’t like her dad to know more about online activity as she doesn’t want him to understand everything and be “on everything.”**

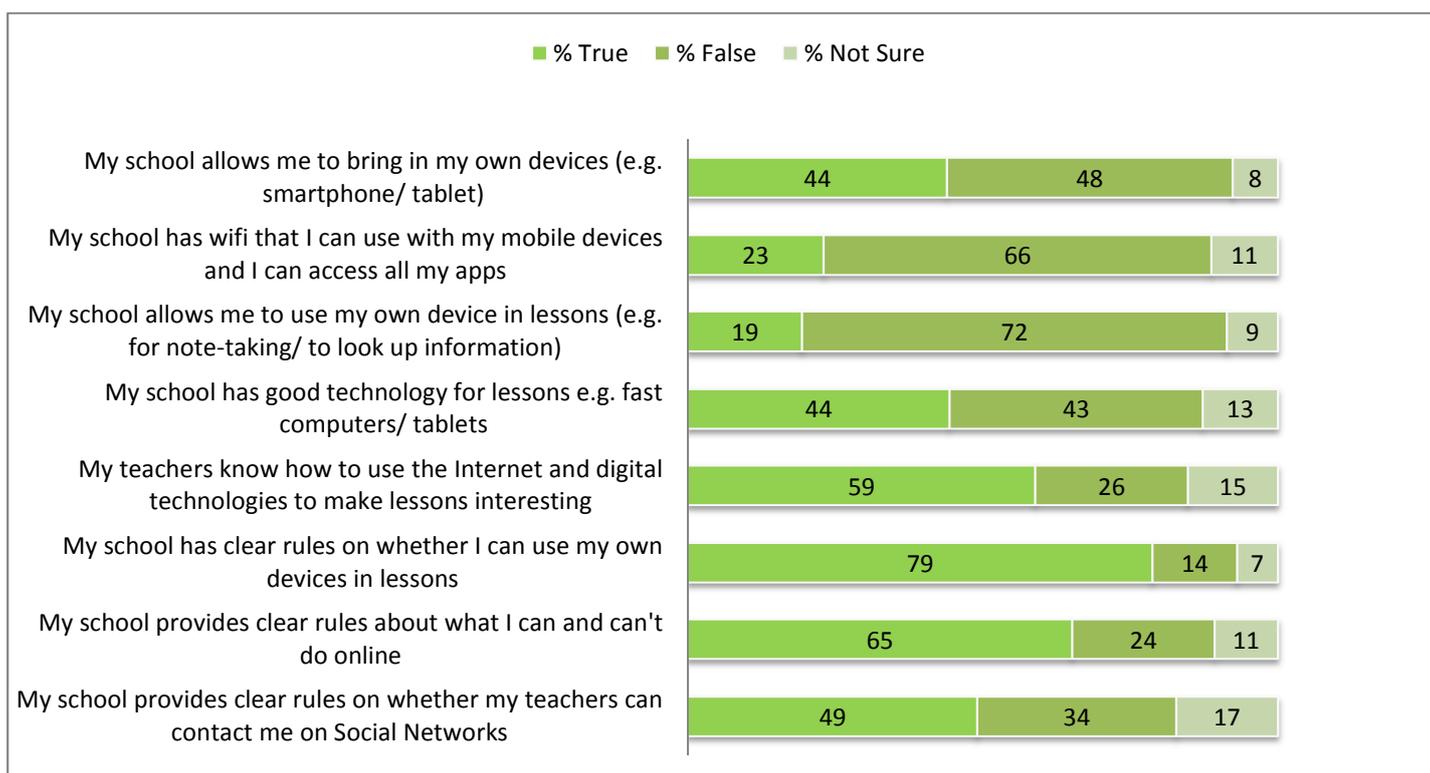
## 6 SCHOOL AND LEARNING

This section focuses on the findings relating to school and learning. It is split into sub-sections covering children’s perception of Internet and technology provision, use and rules in school (which are compared by FSM, School Language Medium and School Urban/Rural Location); lessons related to Internet use; exploring the role that Internet and digital technologies play in children’s homework and revision; exploring informal learning and children’s use of the Internet for school work; children’s reports on online safety and critical thinking lessons they currently receive, and would like more of, related to e-security, info-critical literacies, copyright and safety related issues like cyberbullying, sexting, etc.; exploring ‘Bring Your Own Device’ (BYOD) and Internet and digital technology provision that children would like in school; children’s views on interaction with teachers outside of school.

### 6.1 Internet and Technology Provision, Use and Rules in School

Figure 6.1.1 presents children’s views of the provision of Internet and digital technologies in their school; their understanding of school rules in relation to BYOD; their perception of use of technologies in the classroom; and their awareness of school rules in connection to these issues.

**Figure 6.1.1 Children’s views of Internet and technology related provision, use and rules in schools**



Q32: Please read each statement below and for each row, select if the statement is 'true' or 'false'. If you are not sure, you can select 'not sure'.  
Base: All children; N=2081.

Less than half (44%) think their school has good technology like fast computers/tablets for lessons. **This suggests that a gap is opening up between children’s access and use of technology at home and elsewhere, and what they perceive as ‘older technology’ in schools.**

In addition, less than half the children (44%) say they are allowed to bring in their own devices into school. However, even amongst those who are allowed to bring in their own devices, **this does not translate automatically to being allowed to use these devices.**

From the qualitative interviews, we saw that children still preferred to access the Internet over Wi-Fi rather than 3G or 4G, **partly due to cost issues** (the contracts they were on). However, **only 23% of children report having Wi-Fi that is useable and only 19% say that they are allowed to use their own devices in lessons.**

It is also noteworthy that **35% (24%+11%) of children say that they are not sure, or do not think their schools provide clear rules about what they can and can’t do (online in school).** More children (79%) indicate that their schools provide clear rules on whether they can use their own devices in lessons.

The interviews supported the findings above with several pupils expressing their frustration at the poor provision of Wi-Fi in their schools. Some children explained that **even though their schools had Wi-Fi**

they were not allowed to use it, or if they were, it was very slow. Some pupils also had mixed feelings about the overall provision of technology in schools with a few voicing their **frustration with often old and slow ‘kit’**. Some said it would be easier to look up information on their phones.

*“The school website is really slow...the school computers are so slow.”*

*“It’s shocking.....they take half an hour to load.”*

*“The internet is so bad you can’t really get on to it properly.”*

There was also concern about inconsistent hardware provision across schools (e.g. some complained that a school a few miles away had iPads whilst they didn’t).

In a few cases, children expressed frustration that solutions didn’t work across all the hardware in school and at home:

*Sam: “Because we haven’t got a colour printer (at home) I will put it (work) on my memory stick and take it to school. But the school and our computer have a different formatting so things will just disappear or be moved and it’s really frustrating.”*

In another case, a child explained the detailed steps he had to go through to transfer content from school iPads which had access to Google Drive, - and the school PCs which could not access Google Drive, and having to use email to transfer documents.

A few highlighted **inconsistent use of the Internet or digital technologies in lessons**, and the fact that different teachers had different rules about whether they could use their own devices in lessons.

*Elin: “Our headmaster has told us that when you are in the classroom, it’s the teacher’s decision – the teachers can let you have the phone out; the teacher can let you listen to music ...it all depends on the teacher.”*

One child offered his own interpretation of why teachers don’t allow phones in lessons currently:

*“Sometimes, teachers think you might text kids in a class higher than you for answers.”*

Table 6.1 allows us to look at the results from a different angle. It presents the responses of children who agreed with the statements in Figure 6.1.1, according to the schools they attended (by FSM,

School Language Medium and School Urban/Rural Location).

**Table 6.1: Children’s views of Internet and technology related provision, use and rules in schools by FSM, school language medium and school urban/rural location**

	Schools with less than 10% FSM	Schools with between 10% & 20% FSM	Schools with more than 20% FSM	English Medium Schools	Bilingual or Welsh Medium Schools	Urban schools	Rural schools
% Agreed with the statements below:							
My school has clear rules on whether I can use my own devices in lessons	79	77	81	81	73	80	75
My school provides clear rules about what I can and can’t do online	66	64	65	65	66	65	66
My teachers know how to use the Internet and digital technologies to make lessons interesting	60	59	58	60	57	59	59
My school allows me to bring in my own devices (e.g. smartphone/ tablet)	53	31	48	57	16	54	17
My school provides clear rules on whether my teachers can contact me on SNS (e.g. Facebook, Twitter)	50	47	50	50	46	50	47
My school has good technology for lessons e.g. fast computers/ tablets	47	45	39	42	51	46	40
My school has Wi-Fi that I can use with my mobile devices and I can access all my apps	34	12	21	27	15	26	16
My school allows me to use my own device (e.g. smartphone/ tablet) in lessons	30	10	17	26	6	25	6

Taken from Q32. Base: All children; N=2081.

As can be from Table 6.1, **children from schools with lower levels of FSM appear to be at an advantage compared to children from schools with higher levels of FSM as more report having better technology (47% compared to 39%)**. In addition, more report being able to use their own devices in lessons (30%

compared to 17%); and having school Wi-Fi that they can use with their mobile devices to access their apps (34% compared to 21%).

It is noteworthy that schools with between 10% and 20% FSM **are the least likely** to allow their children to bring in their own devices, provide free Wi-Fi that children can use, or allow children to use their own devices in lessons (all issues related to BYOD).

When comparing English medium schools with Bilingual/Welsh medium schools, **the latter have more children who report that their school has good technology (51% vs 42%)**. However, significantly more pupils from English medium schools than Bilingual/Welsh medium schools report being able to bring in their own devices (57% vs 16%); use their own devices in lessons (26% vs 6%) and having school Wi-Fi that they can use with their mobile devices to access their apps (27% compared to 15%).

When comparing urban and rural schools, children from urban schools appear to have a slight advantage, as more report having good technology for lessons (46% vs 40%). Similarly, more report being able to bring in their own devices (54% vs 17%); being able to use their own devices in lessons (25% vs 6%) and having school Wi-Fi that they can use with their mobile devices to access their apps (26% vs 16%).

Interestingly **for the three statements in Table 6.1 which relate to rules concerning Internet use in schools - there is very little difference across the schools**, regardless of school levels of FSM, school language medium or whether schools are located in urban or rural areas.

Another important finding is that **only 59% of children feel that their teachers know how to make lessons interesting using technology**. However, from the qualitative interviews, **we realised that the children did not themselves always realise how the Internet and digital technologies could be used to make**

**lessons interesting** – with only a few giving examples like teachers allowing them to text answers to the smart board (until someone spoilt this by texting something rude); teachers using YouTube videos; teachers using iPads, or teachers using QR codes in the lessons (which was described as “fun”).

**When teachers were able to use videos and other technologies to engage them in lessons, this was well received by pupils**. For example, Joanna, referred to the use of videos by one of her teachers during a lesson:

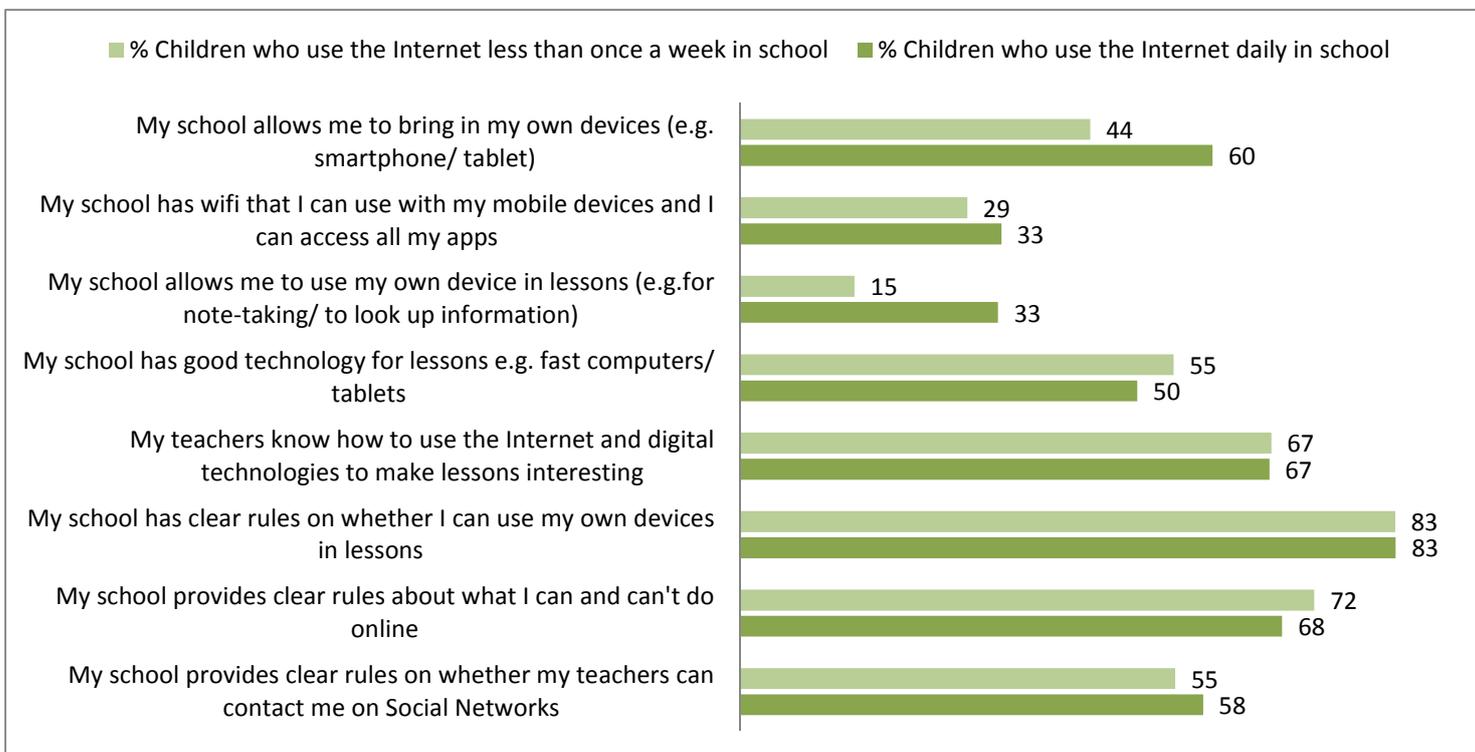
*“Yeah, it is quite a fun way of doing things, and it helps you picture things more easily when you can actually see it.”*

From our qualitative interviews, we also learned that schools sometimes also provide Virtual Learning Environment (VLEs) like Moodle, Edmodo – and now Hwb – a soon-to-be fully rolled out, Wales wide learning platform - for their pupils to access learning materials from home. It is worth noting that schools also sometimes subscribe to services like ‘My Maths’ and ‘SAM Learning’, additional learning resources for their pupils.

Figure 6.1.2 presents the results from a different perspective: it compares the results of children who say they use the Internet daily in schools (so the practice is embedded), with those who say they use the Internet less than once a week in school.

**It is important to note that children who report using the Internet in schools may be using it for a variety of purposes, not necessarily in lessons or for school work.**

Figure 6.1.2 Children who agree with the statements below, who use the Internet daily and less than once a week in school



Statements above taken from Q32. Base: children who use the Internet daily in school (N=428) and less than once a week in school (N=494)

For all the statements in Figure 6.1.2 that focus on schools providing clear rules; provision of technology; Wi-Fi access; or perception of effective use of technology in lessons, **there is little difference in the numbers of children who agree with the statements**, when comparing those who use the Internet daily in school and those who use it less than once a week in school.

Interestingly only 33% of children who say they *use the Internet daily in school* report that their school has Wi-Fi that they are allowed to use. This suggests that they are either accessing it on their school's PCs, or relying on their own network plans to access the Internet via their own mobile device.

However, when considering issues related to BYOD, more children who claim to use the Internet daily in schools, than children who claim to use it less than weekly in school agree that their school allows them to bring in their own devices (60% vs 44%) or use their own devices in lessons (33% vs 15%).

This suggests that there **may be other barriers that these children face which prevent them from using the Internet more often in school**. This is also suggested by the fact that only 29% of children who use the Internet less than once a week in school are reporting that their school has Wi-Fi that they can access and use.

## 6.2 LESSONS RELATED TO INTERNET USE

The following questions, shown in Table 6.2, explore the lessons that children receive in school time, related to general Internet use, as well as on topics covering information literacy, e-security and personal safety.

**Table 6.2 Children indicating if they have had the following Internet related lessons in school**

%	Yes	No	Not sure
Been shown good websites for homework/ revision?	80	14	6
Been taught how to use search engines like Google more effectively?	69	21	10
Been shown how to report upsetting content?	59	26	15
Been shown how to use Internet-based software like Google Docs, Google Spreadsheets etc.?	55	30	15
Been shown how to create a blog/ website?	51	38	10
Been taught about online scams?	51	34	15
Been taught how to tell when online content might be biased?	50	31	19
Been taught about Creative Commons licenses and media (photos, music, videos)?	32	45	23

Q28: Using the tick boxes on each row, please indicate if in school you have...(Select yes, no or not sure). Base: All children; N=2081.

As can be seen, **80% of children say they have been shown good websites for homework/ revision**. Whilst this may be true, **our qualitative interviews showed that children are using a narrow range of websites for research and homework help, and appear to do very little independent, school related**

**work outside of school.** Encouragingly, 69% say they have been taught how to use search engines more effectively, and more than 50% of children say they have been taught how to blog, and use cost saving and potentially collaborative services like Google docs and spreadsheets. However, relatively few (32%) have had lessons about Creative Commons Licenses. In terms of lessons on online scams, and evaluating content, it is important to note that **only half the children say they receive this.** Also, 40% of children report they have not been shown how to report upsetting content.

### 6.3 INTERNET AND TECHNOLOGY USE IN HOMEWORK AND REVISION

We also wanted to investigate what role the Internet and digital technologies played in children's revision and homework activities, as well as gain insights into their information literacy practices. The qualitative interviews gave us insights on this.

We found that children used a number of devices to complete homework. **Whilst the main homework activity still centred around the family PC/laptop, children often used their smartphones and tablets to carry out their research for homework.**

Similarly, many children explained that they would discuss homework/ school work/ lessons by calling, sending messages, doing video chat, taking screenshots, or voice notes with their friends using a range of social network and social messaging platforms. **They would use whichever technology was available and appropriate to use.**

*Melissa: "Sometimes friends send me voice notes telling me what to do for homework."*

Some wanted clear boundaries between school work and home life, and resisted having apps that were for school work like 'Edmodo' a virtual classroom app. One participant, Melissa, explained that she hasn't got Edmodo on her phone because:

*"My phone is my own thing."*

Homework does not appear to be an activity which inspires many of the children we interviewed.

One participant, Trudy, explains how she researches a topic for homework:

*"I just stick with Google... If I have a topic to research, like say 'Jack the Ripper,' to find out his real name, I*

*will use a few websites like Ask Me, or Wikipedia, or go on people's websites....one might say Bob, and another might say Rob and if you get more Bobs than Robs you go for that one."*

From their explanations, **most seemed to use a narrow range of websites when researching content for homework.** Sites like Wikipedia appeared to be very popular as illustrated by a participant, Nina:

*"I go on Wikipedia first because that's the most trustable one ... cos it comes up all the time. I search in the name and the picture comes up on Google, and some information about it [the search]."*

However there were mixed views on Wikipedia – some of the children's schools endorsed this whilst others did not, and a few pupils, like Joe, explained that whilst he believed Wikipedia may not always be correct he still uses it:

*"It's never been wrong for me. Because whenever I hand it into a teacher she's always said it's fine."*

Homework also seemed to be an activity that could be left to the last minute, unless it was part of an assessment, in which case, the children explained, they would put in more effort. **Copying and pasting content from the Internet appeared to be a common activity** as illustrated here:

*David: "I copied and pasted some stuff from Wikipedia and gave it to my teacher. She said 'this is really good' and then realised it was from Wikipedia. I got into a bit of trouble."*

Another pupil, Nina, explained that she does a 'copy' and 'paste', but changes the words to her own. She does this for what she considers the 'less important' assignments:

*"I've never been caught out 'cos I don't do it so it's obvious. I go on the third or fourth page on Google."*

**Most of the children interviewed said they knew they should compare information from more than one website to check if the information was reliable.** Many also knew to look for **well branded websites to get trusted information** e.g. BBC Byte Size, etc. Other strategies for homework research included checking with peers if they had the same information in their homework.

One participant, Evan, explains how he assesses the reliability of websites:

*"I would look at the green (URL) – shows you what/where the website is"*

Two of the children interviewed mentioned crediting their sources:

*Joanna: "if I copy a specific bit of information I generally do quote (credit the source) it".*

It is important to note that **very few children appear to explore the Internet for learning materials (in a curricular sense - for homework help/revision) unless specifically asked to, and even then, only a few did this.** They were **more likely to look up information related to personal interests and hobbies.**

*Nina, 13: "I've got a Welsh GCSE coming up soon, and I've got the Welsh GCSE app on my phone to help me revise. Our teacher told us about it and we downloaded it".*

**Children appeared to use 'Google Translate' a lot for language related work.**

One participant also highlighted a typical view for homework help:

*Jay: "If I get stuck on homework I will ask my parents."*

**This again highlights importance of parent's digital literacy and competence.** Others highlighted other family members they would turn to for support like older siblings.

**In a very small number of cases, the children interviewed claimed not to need to use the Internet much – but relied on books.**

### 6.3.1 DISTRACTION AND SELF-REGULATION

In both a home and school setting, the children interviewed acknowledged that technology could distract them and interrupt their activities like homework/ lessons, and there were varied responses on how able they were to regulate this. In some cases, they would give in to the distraction, and interrupt their homework, in other cases they were able to regulate themselves to complete the tasks in hand.

One of our participants, Adam, explained that he was mainly interested in connecting with his friends via online games on the PlayStation. However, he doesn't play during the week as it "gets in the way of learning" and tries to only play on the weekend, when he said he could play for up to 10 hours.

Another participant, Sharon explained that she had installed Snapchat on her iPad Mini rather than her phone, to reduce distraction:

*"If it were on there, I would be constantly checking."*

## 6.4 INFORMAL LEARNING AND USING THE INTERNET FOR SCHOOL WORK

Our interviews showed us that children were using their devices to enable them to learn informally. Much of this activity was mediated by smartphones and tablets and driven by personal interests and hobbies.

Watching videos appeared to be an important way to learn all manner of things: from football drills and exercise programmes, to cooking, make up and fixing damaged phones. But they also used other online resources:

*Trudy: "Learning Welsh, it wasn't sticking in my head. My sister said 'write it down and keep going over it'. I went online, and typed in 'how to remember' and found a website on how to study which helped me."*

*Clara: "I use IMDB which is an internet data base (for actors). I'm quite geeky and I obsess over actors and I search for David Tennant or Matt Smith."*

In one case, the learning had led to the development of a business:

*Rose: "I watched loads of tie-dye videos (on YouTube) and Galaxy Jumpers and things like that to see how to make them...(and did)...I just posted photos of tie-dyes (on Facebook) and then people would just pop up saying that they wanted to buy them. I've sold something like 30 of them...I've made a business with my friends now"*

Another participant, Clara, explains how a project that started in primary school, inspired ongoing development:

*"When I was in Year 4, my friend and I started a project using a programme called Scratch – it's easy to use...you put blocks together and make games on it...we were making a game called 'Futuristic Past' ...we started e-mailing each other back and for, with stuff for our game and she e-mailed when it was finally finished (in Year 9)! She did most of the programming and I helped make characters for it. I liked to make ideas."*

Another participant, Ryan, expressed a desire to own Grand Theft Auto (GTA) - the online version - and showed a preference for using the game in the capacity of a "citizen" rather than a "criminal". He explained that he would like to customise the program with add-ons and have a virtual job in the game as a police man/bin man:

*"You have to apply online, and write a CV".*

Table 6.4.1 presents a small selection of children's learning, civic and participatory activities, and digital technology achievements, by gender.

**Table 6.4.1 Some learning activities and achievements by gender**

%	Boys	Girls	All
Listened to podcasts or watched videos to learn something new	45	39	42
Set up a Facebook Page for your own interest or hobby or cause	36	27	32
Written a computer program	22	7	14
Got an award for something I made using digital technologies	18	6	12
Created an app	14	6	10
Set up an online petition or raised awareness of a cause online	8	7	8

Q19d,g: Have you done any of these things? Q16a,b,c,d: Please use tick boxes to indicate if you have (ever)...Base: All children; N=2081.

As can be seen, boys lead girls in learning activities and achievements. **Overall, it is encouraging that 42% of children say they have listened to podcasts or watched videos to learn something new.**

However, **relatively low numbers of pupils say they have created apps (10%) or written a computer program (14%).**

In terms of **civic activity, a small percentage of children claim to have set up an online petition (8%). A higher number of children say they have set up a Facebook Page to promote their interests, hobbies or causes (36% of boys and 27% of girls).**

Table 6.4.2 presents how children use the Internet on a daily basis to learn informally and for school work, and compares this by gender and FSM.

**Table 6.4.2 Using the Internet daily to learn informally and for school work - by gender and FSM**

	Boys	Girls	Schools with less than 10% FSM	Schools with between 10% & 20% FSM	Schools with more than 20% FSM	All
% Daily Who:						
Read or watched the news on the Internet (via news websites/Twitter/Facebook etc.)	42	39	37	43	43	40
Used the Internet to look up something you didn't know or understand	33	30	28	34	33	31
Searched for information about personal interests (sports, celebrities, etc.)	34	28	28	32	34	31
Used the internet for school work	20	14	19	15	15	17

Q11a,d,g,h: Which of the following things have you done IN THE PAST MONTH on the Internet? Choose from 'Every day', 'Several times per week', 'Once a week', 'Two or three times in the last month', 'Once in the last month', 'Not at all'. Base: All children; N=2081.

As can be seen, overall, boys are slightly more likely than girls to use the Internet for school work (20% vs 14%) and informal learning activities like searching for information on personal interests (34% vs 28%) daily. In terms of children from schools with different levels of FSM, it is of note that there is **little difference** in informal learning with **slightly more children from schools with more than 20% FSM use the Internet for these activities than children from schools with less than 10% of FSM.** However, when looking at 'using the Internet for schoolwork', the reverse is true. Children from **schools with lower FSM are slightly more likely to use the Internet for school work than children from schools with higher FSM.**

## 6.5 ONLINE SAFETY AND CRITICAL THINKING IN LESSONS

We also asked children if they had received lessons covering e-security, info-critical literacies, copyright and safety related issues like cyberbullying, sexting, etc. Table 6.5.1 presents these results.

**Table 6.5.1 Children indicating if they received lessons related to e-security, info-critical literacies, copyright and safety related issues like cyberbullying, sexting, etc.**

%	Yes	No	Not sure
Cyberbullying (including trolling)	83	12	6
Responsible behaviour online	80	13	6
How to handle peer pressure	69	20	11
How to use social networks safely (e.g. Facebook, Twitter, Instagram)	68	27	5
Managing your privacy and data online	68	25	8
Social networks and your reputation online	67	17	15
Inappropriate contact from others online	63	25	12
Sending explicit/ nude images of yourself or your friends (sexting)	59	28	14
Copyright and images/ videos/ music	51	31	18
Plagiarism (copying something you found on the Internet)	49	33	18
Identity theft - what it is - how to prevent it	48	32	21
Downloading (copyrighted software, music or movies)	47	37	17
Other laws online	47	28	25
Viruses and other Malware (bad software)	44	35	21
How to use messaging apps like Kik/ BBM/ Snapchat safely	40	52	7

Q29, 30: For the topics on each row below, please indicate if you have received lessons in school time from your teachers/ school community police officers/ other professionals. Base: All children; N=2081.

**More than 80% of children said they had received lessons on topics like cyberbullying and responsible behaviour online.** Other topics which more than 60% of children report receiving lessons on, include, ‘how to handle peer pressure’, ‘using social networks safely’, and ‘social networks and your online reputation’. 59% of children said they had received lessons on sexting.

**Fewer than half the children report receiving lessons related to e-security or ID theft.**

It is important to note that very few children are receiving lessons that relate to newer social messaging platforms like Snapchat, Instagram, Kik and Twitter, where have been adopted by more than 50% of children (Figure 3.7).

From the qualitative interviews we found that children had mixed feelings about the current

provision of Internet safety lessons in schools. Some schools did not offer direct lessons, but relied on school community police liaison officers to deliver sessions, whilst others ran sessions during Personal and Social Education (PSE). **Many young people said they believed their teachers had the knowledge but did not have sufficient time to deliver sessions.**

*Sam: “The police officer who comes in does a good job, but he’s been telling the students that since we’ve been really small so we kind of know it all already. So it can get a bit annoying.”*

*Mary: “I think teachers don’t do enough. Obviously they do a lot but they don’t go into it. If someone says they’re being bullied they’re just like ‘get on with it’. Most of the time they just ignore you...I think they should take it a bit more seriously.”*

When Mary was asked what she would like more Internet Safety lessons to include, she replied:

*“What to use, what’s good, what to look out for, privacy settings. I quite like watching the videos. People acting out scenarios”.*

Sometimes the children were given incorrect information in their lessons. For example some were told in a lesson that Facebook owned their photos and that Facebook could use their photos on a dating site.

**Such misinformation or ‘scare-mongering’ tactics do not help efforts to promote digital literacy or prepare pupils to think critically about their privacy, data, or how they can best use these social platforms without compromising their privacy.**

We also asked children if they wanted further lessons on the topics they said their schools already provided lessons on, and their responses are presented in Table 6.5.2.

**Table 6.5.2 Lessons taught and further lessons requested**

%	Taught currently	Would like more lessons
Viruses and other Malware (bad software)	44	49
Identity theft - what it is - how to prevent it	48	48
How to handle peer pressure	69	48
Other laws online	47	46
Cyberbullying (including trolling)	83	44
Responsible behaviour online	80	44
Downloading (copyrighted software, music or movies)	47	43
Copyright and images/ videos/ music	51	43
Managing your privacy and data online	68	43
Inappropriate contact from others online	63	43
Social networks and your reputation online	67	40
Plagiarism (copying something you found on the Internet)	49	40
Sending explicit/ nude images of yourself or your friends (sexting)	59	38

From Q29,30,31. Base: All children; N=2081.

It is noteworthy that for almost all topics, **more than 40% of children** indicate that they would like more lessons. This is despite the fact that for some of the topics, more than 60% say they receive lessons. **This suggests that current lessons may not be addressing needs.** Based on the lessons requested, **the topics that most children appear to be interested in are e-security topics like identity theft; viruses; laws online; and how to handle peer pressure.** They also wanted more **discussion-based lessons that involved them, more stories and more practical ‘how to’ sessions, in relation to managing privacy settings on the platforms they used.**

## 6.6 BYOD AND TECHNOLOGY PROVISION THAT CHILDREN WOULD LIKE

Table 6.6 presents our findings on children’s views of what Internet and digital technology provision and guidance they would like in school.

**Table 6.6 Children’s views of what Internet and digital technology provision and guidance they would like in school**

% Said I would like:	I agree	I disagree	I don't know
My school to allow me to use my own device (e.g. smartphone/ tablet) in lessons	86	7	7
My school to have good Wi-Fi that I can use with my own device	86	8	6
My teachers to make better use of technology and the Internet to make lessons more interesting	83	8	9
My school to have better technology (e.g. faster computers/ tablets) for lessons	82	9	9
My school to provide us all with tablets we can use for lessons	82	9	9
My school to provide better guidelines on what I can and cannot use in lessons and in school	55	30	16

**Q33: Please read the statements on each row below, and select if you ‘agree’, ‘disagree’ or ‘don’t know’.** Base: All children; N=2081.

Not surprisingly, more than 80% of pupils said they would like better technology in schools and Wi-Fi that they could use with their devices. **More surprisingly, a large number (86%) wanted to be allowed to use their own devices in lessons.**

Our qualitative interviews gave us insights into how they would like to use these devices:

*Mary: “I would like to use my phone for searching for answers and listening to music. I tend to get on with work more when listening to music because nothing else is distracting me...that’s it really”*

Other reasons mentioned include taking notes (text and voice), taking photos of homework to complete, and setting reminders.

The qualitative interviews also showed us that children were sensitive to the challenges schools faced in allowing them to use their own devices in schools (referred to as a ‘Bring Your Own Device’ – BYOD policy). They showed a level of maturity when discussing the pros and cons of being allowed to use their own devices in schools.

*Jay: “I think people without phones would feel left out.”*

One participant, Dylan, felt that if phones were to be used regularly during lessons, there would be a need for access to be controlled otherwise children could end up playing games online rather than engaging in the lesson:

*“You could be on Google, and one click and you could be on something else.....I think it would just get in the way to be honest, and distract you.”*

Others provided contrary viewpoints, preferring instead to be given the responsibility to manage their devices.

*Mary: “I think if we were allowed to use our phones in class, less people would actually be on them because you’re always secretly on them...now if you have them on your desk, you’re busy making sure your teacher isn’t looking. I think we should learn to manage...”*

**82% of children said they wanted their schools to provide them with tablets they could use in lessons.** This was confirmed in our qualitative interviews.

*Emma, “I would worry about my iPad getting stolen if I brought it to school. It would be good if school provided iPads – better than the school computer system which is really bad... we can also get educational apps for the iPad.”*

*Melissa: “Using iPads is better, using a book and a pen is just boring, and you can’t have as much information...So you could make your writing more interesting... I think you learn more if you can have your own stuff.”*

Another pupil, Rhodri, explained that if he was allowed to take a tablet into school:

*“It would help cos I can do my homework straight away.”*

Findings from Table 6.6 show that **83% of pupils wanted their teachers to make better use of technology and the Internet to make lessons more interesting.**

It is also noteworthy that **more than 55% wanted better guidelines from schools on what they can and cannot use in lessons and in school.** This matches our findings from the qualitative interviews, where children highlighted inconsistencies in what teachers allowed in classes related to technology (Section 6.1).

A few children also cited recent rule changes in their school, which did not allow any teachers to let any of them use their personal devices in school. **This was deemed to be unfair.**

## 6.7 INTERACTION WITH TEACHERS OUTSIDE OF SCHOOL

In general, social media platforms are increasingly being used to engage audiences. Given this backdrop and the relatively recent trend of school teachers beginning to use social media channels like Twitter to engage with their pupils, we wanted to understand what children thought of this, and how best they wanted to be engaged and given support outside of school.

As mentioned in Section 6.1, some schools already provide Virtual Learning Environment (VLEs) for their pupils to log on to from home. From the interviews, children said that sometimes these VLEs also allowed messaging, and sometimes schools also provided a school emails service for pupils to contact teachers. However, ‘emailing teachers’ didn’t appear to be a common practice amongst the children we interviewed. With only a small number saying they had done it.

When discussing social media platforms as alternative channels to interact with teachers, a number of children expressed concern about the possible invasion of privacy they felt might happen. **Having appropriate boundaries with their teachers seemed paramount in their minds, as a number cited (in quite righteous tones) that teachers were not allowed to add them as friends, or interact with them on social media like Twitter or Facebook – this despite the schools having social media accounts on these platforms.**

*Clara: “You can contact teachers via the school email, and Twitter. If there was any more it would be too much. It could be a bit awkward or a bit weird having that level of interaction not in school time.”*

It is clear that for these children, **social media platforms are for personal communication and not to engage in two way conversations with teachers. There is a clear delineation between school and social ‘spaces’ in terms of the different communication channels.** There were a **small number of children who felt that platforms like Twitter or a Facebook page could be useful, provided appropriate boundaries were maintained.** They did not want teachers encroaching on their ‘private spaces’. In general, email was considered by the participants as a functional tool (used to sign up to online services). **However, when it came to contacting teachers, email**

**still appeared to be the preferred mode of communication.**

For example, one participant, Nina explained that she would like to interact with teachers outside of school time, but only if it's important:

*Nina: "When you get home it's your time, your personal time, it's not school."*

Nina went on to highlight that if she did need help then she would contact the teacher and email would be her first choice.

*Nina: "Using BBM or other group chat (with teachers) would be annoying because when you're on your phone you would see all the messages, and you don't want to mix your personal life with your school life... that's the reason I don't have Edmodo on my phone, my phone is mine."*

*Nick: "I've never emailed a teacher about homework. If it was more out there I'd do it all the time probably...I don't know all of the teachers' emails...You have an email account in school but not many people use it to be honest."*

When asked if she had ever emailed a teacher, another participant, Trudy, explained she would prefer contacting them using social platforms:

*"I think you can email, but it doesn't really work. It is good to be able to get hold of them if you can't do your work. It would be better on Facebook or Twitter".*

In another social media example, Mary, talked about an English teach who has a Twitter account:

*"Yeah I think it's good because a lot more people will see it and think the 'the teachers are nagging me to do homework'. I remember her saying on Twitter 'remember you have a test tomorrow,' and I remembered then".*

However this mode of interaction was not liked by other pupils.

*Joe: "I wouldn't ask them for help. I'd ask one of my mates for help."*

## 7 DIGITAL SKILLS, LITERACIES AND BARRIERS

This section focuses on the findings relating to children's digital skills and literacies and the barriers that stop them from participating full online. The section is split into sub-sections covering digital literacy; self-efficacy/confidence (which we further compare by gender and monthly use/less than monthly use of smartphone or tablet); appropriating the technology; and barriers faced.

From our interviews, we saw children display a varied range of skills that allowed them to undertake a range of activities. Activities like playing games online with friends, using social network platforms to socialise and share experiences, and access to entertainment seemed important to the children for a sense of belonging. The children we interviewed were also able to share the merits of the different social platforms based on their own experiences, and in some instances, chose which ones they would use to engage with peers, friends and family.

Overall the children interviewed showed good social/emotional literacy, and displayed a good understanding of online risk. They appear to have developed a range of strategies to keep themselves safe online. For this age group, support from parents and family members also appeared to be very important.

However, there were gaps too. Whilst many were confident explorers, ready to try out new platforms (often recommended by their friends), not all understood how to use them, or were allowed to use them:

One participant, Jay, explained that he did not "get Snapchat". He preferred to use Kik. Talking about Twitter, he said:

*"I am not really going to get involved in that....I just don't really get it (Twitter) in general."*

Similarly, experiences around creating a YouTube channel varied, with at least one very experienced YouTuber. Whilst many were creating and sharing content by using simple-to-use apps like VideoStar, and platforms like Facebook, Snapchat, Instagram and YouTube - this did not necessarily involve the most complicated of skills, or translate into inspiration to develop new skills. **However, children participating online are also gaining literacies around the new**

**media environment, and helping create the norms in that environment, and so these experiences are vital.**

Games like Minecraft which were popular with several of the children we interviewed, allow children to develop many creative and technical skills – however, mainstream education appears to be a step behind in engaging pupils in the same way, or in 'leveraging these skills and competencies' for more formal educational purpose.

**There appears to be a disconnect between what children enjoy (which encompasses use of the Internet and digital technologies) outside of school and their use of the Internet and digital technologies in their formal education.** In school related activities, they appear to be less creative, and seem to be using a narrow range of websites for homework and help, and often copying and pasting content from the Internet for standard homework. **And whilst many of them were aware of the social aspects related to technology use, it was apparent that they were not being challenged in their education to develop a full range of technical, creative, social and info-critical skills.**

Some did not understand how search engines worked or how to use privacy settings on social network platforms – the latter despite many claiming to know this.

For example, one young person, Ryan, displayed a relatively good technical understanding of the Internet networks (albeit with some inaccurate numbers), and explained it as:

*"Different computers...users accessing sites 10,000 computers in the UK...'4 billion worldwide users accessing email/social network'...a massive network of everything going on...a spider's web that grows and grows."*

Yet Ryan did not realise it was possible to tell which social platform accounts were the legitimate (verified) accounts of real celebrities:

*"I think they're fake, anyone could go on there and say they are Justin Bieber."*

Whilst others who subscribed to these celebrity pages gained the opportunities to work out which were the verified accounts and which were merely fan pages.

Some children also knew how to get their media without paying:

*Sophie: "Buying music costs but you can download them as files from YouTube on the PC."*

Some showed a detailed understanding about the different online communities:

*Clara: "I tend to steer clear of the Wiki answers or Yahoo answers and different sorts of ones, because it's people answering questions and their knowledge might not be entirely true."*

Again, these are skills that children develop by actually exploring, using and sometimes participating in these online communities. The interviews showed us that **children who undertook more activities online, appeared to be have better info-critical skills** – understanding better the various contexts and features of different social platforms, than non-users.

A small number did not have certain functional skills:

*Thomas: "I don't know how to delete (my social network) accounts."*

Many were not really aware of who owned websites. One participant, Thomas believed that trusted sites on the Internet were:

*"Provided by the government and verified by a government signature"*

Others did not know how search engines worked, believing that content from one platform would be immediately accessible on Google:

*Trudy: "... because Facebook puts photos of you on Google."*

Similarly some could not remember their social network account log-ins, in which case they said they would sign up for the account again. On the other hand, some participants knew how to recover them properly:

*Clara: "You can press a button and ask for a new password."*

## 7.1 DIGITAL LITERACY

In this sub-section, we present our quantitative findings on children's digital literacy. **We know from other research that contrary to the idea of children being 'digital natives', children do not automatically become digitally literate (Helsper and Eynon, 2009).** We also know from Section 3.6 that children's activities are linked to the type of online access they

have and that children who used smartphones and tablets daily are more likely than non-users to undertake all the activities listed.

In our research project, we wanted to explore children's digital literacy using three indicators:

- the range of activities that children participated in
- their self-reported ability with a specific list of skills
- their self-efficacy (self-reported confidence online)

Section 3 has already addressed children's activities. We know that on a daily basis, out of 23 activities measured, children reported undertaking an average of **6.9 activities**. On a monthly basis, children report undertaking **16.6 activities**.

In the following sub-sections, we explore children's self-reported skills and self-efficacy. We also compare these self-reported skills by those who use smartphones and tablets at least monthly, and those who use it less frequently than that.

Table 7.1a-c provides data across a range of 21 skills investigated in our questionnaire, and we compare these by gender and monthly use/non-use of smartphone or tablet.

Table 7.1a highlights our findings on children's self-reported skills related to Internet use and critical understanding.

From Table 7.1a, we can see that boys are ahead of girls in some self-reported info critical and technical skills like installing programmes (86% vs 75%) and detecting which messages are scam/junk messages (73% vs 67%). Girls are ahead of boys in their ability to 'set up an online group for messaging' (93% vs 84%), 'take a screen shot' (96% vs 92%) and shop online (96% vs 88%). These latter skills are associated with use of social network and messaging platforms, which are used by more girls than boys, so the results are not surprising. In other self-reported skills, boys and girls appear to be more evenly matched.

**Table 7.1a A comparison of self-reported skills related to Internet use and critical understanding, by gender and monthly use/ non-use of smartphone or tablet**

	Boys	Girls	Use smartphone/ tablet at least once a month	Do not use smartphone or tablet at least monthly	All
%					
Skills related to Internet use and critical understanding					
Download and use an app	99	99	99	95	99
Connect to a Wi-Fi network	98	99	98	95	98
Take a screen shot (also called a screen grab) on a mobile device	92	96	95	76	94
Shop online	88	96	93	86	92
Setup an online group for messaging (e.g. on BBM, Whatsapp, Kik, iMessenger)	84	93	90	64	88
Find information on how to use the Internet safely	84	83	84	82	84
Bookmark a website/ store it in Favourites	82	81	81	82	81
Download and install a program on a pc/ laptop	86	75	80	78	80
Detect which messages are scam messages/ junk mail	73	67	70	68	70
Compare websites to decide if information is true	71	69	71	61	70

Based on yes responses from Q8a,b,c,f;Q9a,d,e;Q10,c,d,e: Which of these things do you know how to do? Please say yes/ no/not clear what this means. Base: All children; N=2081.

As a whole, most children (at least 70%) report having skills (as listed above) related to Internet use and critical understanding.

When comparing children who use a smartphone/tablet at least once a month, to those who use it less than once a month, the main differences appear to be in the following self-reported skills: 'being able to take a screen shot on a mobile device' (95% vs 76% which is unsurprisingly higher in groups that use a mobile device more frequently), 'setting up an online group for messaging' - (90% vs 64%), shopping online (93% vs 86%), and 'comparing websites to decide if the information is true (71% vs 61%). **This last finding is of note as it highlights that use of smartphones/ tablets is linked to having info-critical skills.**

Table 7.10b highlights our findings on children's self-reported technical skills in relation to general online safety and privacy.

**Table 7.1b A comparison of self-reported technical skills related to general online safety and privacy, by gender and monthly use/ non-use of smartphone or tablet**

	Boys	Girls	Use smartphone/ tablet at least once a month	Do not use smartphone or tablet at least monthly	All
%					
Technical skills related to general online safety and privacy					
Set up a password on a mobile tablet or smartphone	97	99	99	88	98
Adjust location settings on a mobile tablet or smartphone	87	87	88	70	87
Delete a record of which sites you have visited on the Internet	86	83	85	73	84
Change filter preferences when using the Internet (e.g. YouTube or Google Safe Search)	72	51	62	54	62
Block unwanted adverts/ pop-ups	64	50	57	53	57
Get past parental controls	55	41	48	39	48
Use a proxy server	29	13	21	21	21

Based on yes responses from Q8e,g,h;Q9b,c;Q10a,b: Which of these things do you know how to do? Please say yes/ no/not clear what this means. Base: All children; N=2081.

There is little difference in the percentages of boys and girls reporting skills like 'adjusting location settings on mobile tablets/smartphones', and 'setting up a password on a mobile tablet or smartphone'. However, boys lead girls in the self-reported skills of blocking unwanted ads (64% vs 50%), getting past parental controls (55% vs 41%), using a proxy server (29% vs 13%), and changing filter preferences when using the Internet (e.g. on YouTube)- 72% vs 51%.

**As a whole, most children say they have the technical skills that relate to 'setting up a password on a smartphone or tablet' (98%), 'adjusting location settings on a smartphone or tablet' (87%) and deleting records of sites visited (84%).** Fewer say they are skilled in blocking unwanted advertisements (57%), or getting past parental controls (48%).

When comparing children who use a smartphone/tablet at least once a month, and those who use it less than once a month, it is not surprising that children who use a smartphone/tablet at least monthly report having the skills that directly relate to the use of these devices. **It is of note however, that more of them claim to have the following skills:** 'get

past parental controls' (48% vs 39%); ', change filter preferences when using the Internet e.g. on YouTube (62% vs 54%) and deleting a record of sites visited (85% vs 73%). **This suggests that they are more broadly confident than children who use those devices infrequently.**

Table 7.1c highlights our findings on children's self-reported technical skills related to managing privacy and safety on social network platforms.

**Table 7.1c A comparison of technical skills related to managing privacy and safety on social network platforms, by gender and monthly use/ non-use of smartphone or tablet**

	Boys	Girls	Use smartphone/ tablet at least once a month	Do not use smartphone or tablet at least monthly	All
%					
Technical skills related to managing privacy and safety on social network platforms					
Log out of social network accounts (e.g. Twitter, Instagram, Facebook)	90	96	93	84	93
Block someone you don't want to have contact with	90	94	93	82	92
Change privacy settings on a social networking profile	88	94	91	83	91
Report someone online on a social network site	84	89	87	79	87

Based on yes responses from Q8d,9f,g,h: Which of these things do you know how to do? Please say yes/ no/not clear what this means. Base: All children; N=2081.

From Table 7.10c we can see that there is little difference in the percentages of boys and girls reporting these skills. Overall it is encouraging that at least 87% of children say they know how to report someone on a social network site, 91% say they can 'change privacy settings on a social network profile', 92% say they can 'block someone they don't wish to have contact with' and 93% know how to 'log out of social network accounts'.

When comparing children who use a smartphone/tablet at least monthly and less than monthly, we see that more children who report using a smartphone/tablet at least monthly say that they are able to: 'block someone they don't wish to have contact with' (93% vs 82%); report someone on a social network site (87% vs 79%); change privacy settings on a social network profile (91% vs 83%) and 'log out of social network accounts' (93% vs 84%). **This**

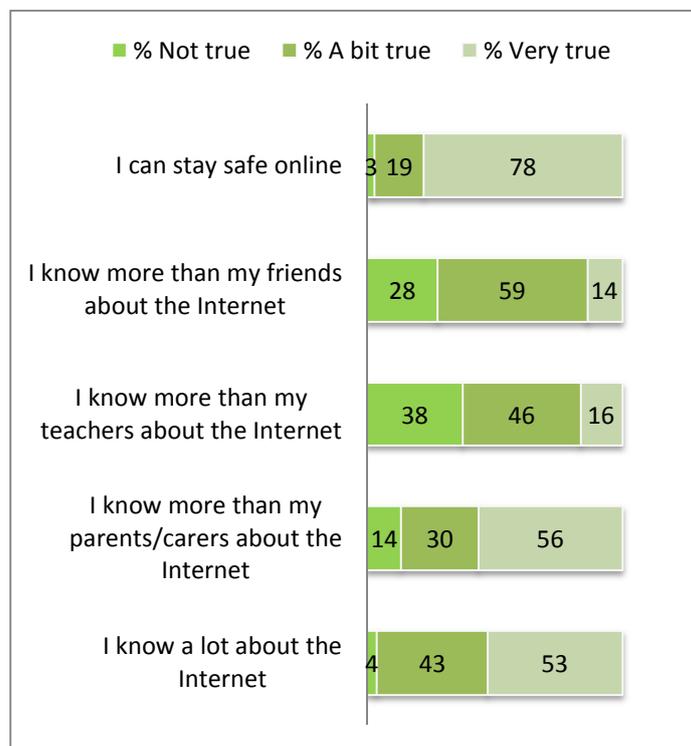
**again suggests a link between use of smartphones and tablets, and confidence across a wider range of skills.**

Overall children report a good range of self-reported skills, possessing an average of 16.8 skills out of the 21 skills investigated in Table 7.1a-c. Boys claim a slightly wider range of skills (averaging 17) than girls (averaging 16.5). This overall high number of skills may be due to the technologies now available for children to use and develop new skills.

## 7.2 SELF-EFFICACY/CONFIDENCE

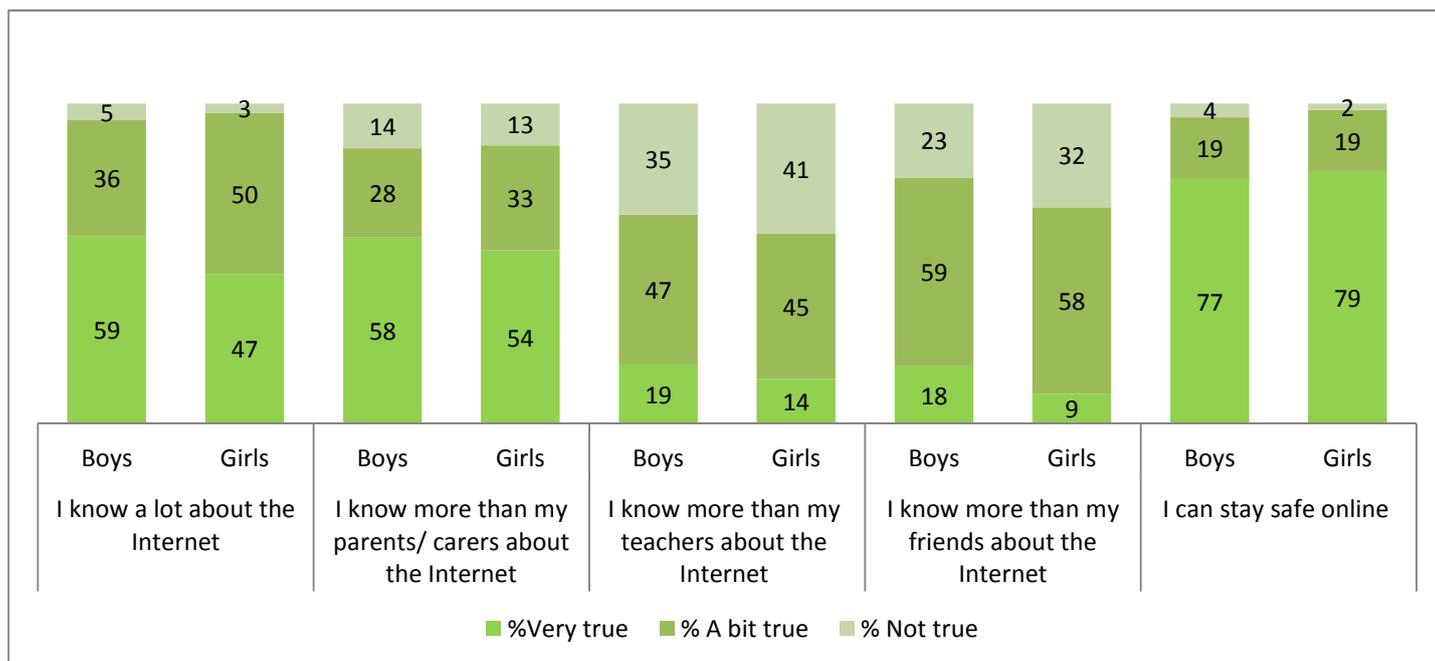
Figure 7.2.1 explores children's self-efficacy online, i.e. their self-reported confidence across a number of statements and compares these figures.

**Figure 7.2.1 Children's self-reported self-efficacy by gender**



Overall, children's self-reported confidence is high – with 86% claiming to know more than their parents (higher than the UK average of 66% reported in the Net Children Go Mobile UK report (Livingstone et al., 2014). 62% say they know more than their teachers, and 96% say they know a lot about the Internet. 73% claim to know more than their friends.

**Figure 7.2.2 A comparison of children’s self-reported self-efficacy by gender**



Q27: How true are the following statements for you (please tick your answer for each row: not true, a bit true, very true) N=2081.

It is important to note that when considering ‘staying safe online’, most children (97%) say that they can stay safe online. Only 3% feel they cannot stay safe online.

*Nick: “I just feel safe on the internet...nothing is going to happen.”*

*Mary: “I’m always safe, because I’m always aware of weird people seeing my stuff. I always make sure my little sister (11) is safe on her things but she’s mostly on games.....I always think to myself of what a policeman said when he came to our school. He said to only post what you’d want your parents to see so that is what I think in my mind.”*

Figure 7.2.2 explores if there are differences in children’s self-reported self-efficacy by gender.

Overall whilst more boys than girls claim the statements are ‘very true’, when including the statements saying ‘a bit true’, the differences between the genders is small. The exceptions are in the statements ‘I know more than my teachers’, and ‘I know more than my friends’ where fewer girls than boys show confidence – i.e. report the statements to be untrue (41% vs 35% and 32% vs 23% respectively).

### 7.3 APPROPRIATING THE TECHNOLOGY

From the interviews it was interesting to see how children are appropriating the technology for their own use. For example, in one of our group interviews with girls, one participant described a norm for communication and expression amongst their peer groups saying they use the ‘fishing rod emoji’ to indicate when someone was deemed to be ‘fishing for attention’ on social media updates.

Children also appeared to be appropriating the technology in other ways:

*Melissa: “I don’t take pictures myself (on Snapchat), ... you can just put it down, face down, and ...take a black picture and then type something on it and send it” – and your friends will reply similarly, and you can keep doing that – she sees this as being quicker at communicating with friends.*

Similarly technology could be used to include friends who do not have access to a service:

*Dylan: “If my friend didn’t have Twitter and there was something on Twitter I would screenshot it and send it to him.”*

Sometimes, as highlighted in Section 4.2, the ‘personal message’ feature of social messaging platforms like BBM could also be appropriated and used to disclose embarrassing details.

*Melissa: "Some people will use their PMs (Status updates) on BBM to broadcast arguments."*

## 7.4 Barriers

Table 7.4 presents children’s views on the things that stop them participating more fully online, or enjoying their time online.

As can be seen, 57% of children **say that they are able to participate online fully/ enjoy their time online, with slightly more boys than girls reporting this.** 40% of children say **the Internet being slow is an issue that stops them participating online more fully/ enjoying their time online.**

The three main barriers boys listed from the list above are: speed of the Internet, advertisements and not having enough websites of interest. The three main barriers girls report are the speed of the Internet (more girls than boys cite this as a problem), advertisements and **‘strangers adding them or trying to talk to them’**. In the case of the latter, more girls than boys (23% to 15%) report this as a barrier, suggesting that girls may be experiencing more of this activity.

**Table 7.4 Barriers that prevent children from participating online more fully/ enjoying their time online**

%	Boys	Girls	All
No, I can participate online fully and almost always enjoy my time online	60	54	57
Internet being slow	35	44	40
Advertisements	22	24	23
Not enough websites that interest me	21	20	21
Viruses	20	18	19
Strangers adding me or trying to talk with me	15	23	19
Blocked websites that I can't access	18	15	17
Seeing my friends being bullied online	13	20	17
Seeing things that make me feel sad, frightened or embarrassed	11	18	15
Being too young for some websites	14	14	14
Gossip or mean comments being shared online	9	18	14
Being worried that things can be easily circulated (e.g. photos, texts)	12	17	14
Cost of going online	13	11	12
Others saying upsetting things to me	10	15	12
Adult content	11	9	10
My parents'/ carer's rules are too strict	8	8	8

Q41: Are there any costs, rules or restrictions that stop you from participating online more fully/ enjoying your time online? (Tick all that apply). Q42: Are there any other issues that stop you from participating online more fully/enjoying your time online? (Tick all that apply)

It is of note that only 8% of children say their parental rules stop them from participating more fully or enjoying their time online.

However our qualitative interviews highlighted such an instance. One participant, Sam, mentioned that he had taken videos of amusing moments, but wasn’t able to share them online as his parent’s rules meant he did not own a smartphone or have any social network or social messaging accounts. When he wanted to share photos with his friends, he explained that he had to either show the photos on his (old) phone or:

*"Sometimes I will send them via Bluetooth to people..."*

Another participant, Rose, shared how her friend’s parent discouraged her online participation:

*"My friend wanted Instagram, but her Mum told her that she was only allowed to have it if she didn't post pictures of herself, so there wasn't any point in her using it."*

Table 7.4 above also showed that more girls than boys (20% vs 13%) report ‘seeing their friends getting bullied’ as a barrier, suggesting that girls perceive the Internet to be a less welcoming, more hostile peer environment. More girls than boys also report that ‘gossip or mean comments being shared online’ and ‘others saying upsetting things about me’ as issues that stop them from participating online more fully and enjoying their time.

Overall however, only 15% of children reported that ‘seeing things that make me feel sad, frightened or embarrassed’ stops them from participating fully online, suggesting that 85% of children may be more resilient to negative content.

However, as highlighted by one of our participants below, such fears can be a real barrier:

*David: "I saw that a girl had killed herself because she was getting cyberbullied on Twitter, so I decided I'm not interested in that.....I prefer to stay off Facebook, Twitter and that sort of stuff in case I get bullied."*

Similarly for cost – whilst only 12% of children overall reported this as a barrier, our interviews showed that costs relating to getting online whilst ‘out and about’ still appeared to be a consideration, with a number of children saying they would look for free Wi-Fi, to save on their data plan charges. **It is also worth noting that we did a comparison to see if there would be differences in the numbers of children reporting the ‘cost of going online’ as a barrier, according to which schools they attended (described using FSM) and no difference was found.**

Similarly the cost of subscription services for items like TV/ music on demand were also highlighted as issues in some families.

*Clara: “You have to pay for Netflix, so we don’t have Netflix..... I don’t use Spotify as you have to pay for that as well.”*

**The interviews also highlighted some other barriers not listed above.**

One participant, Rose, who describes another barrier – **a lack of Internet access** – as follows:

*“No signal is really annoying.”*

Another reported having to travel in to areas with mobile coverage when they needed to access some services.

Another barrier was lack of privacy from parents. One participant in a group interview said that what stopped him and his friends from doing things online was:

*“Your parents finding out about your private life.”*

Another barrier we identified was **fear of harm due to not understanding/ being able to manage the risks.**

One participant, Thomas explained that he did not want to produce videos or upload creative content, due to a fear of having his IP address identified. He expressed concern over people finding out where he lived. He said that if there was no danger of this happening, he would like to produce videos.

Sometimes stopped young people did not create and sharing content, due to the **fear of being judged by their peers.**

*Rose: “You don’t know if people will like them or not. If others don’t find it funny and don’t like, you’d have to delete it. But they would still have seen it.”*

**Being misunderstood in online communication** was also identified as a barrier.

*Sharon: “Sarcasm is hard to express; I try to keep out of stuff – like to hear what is going on but don’t want to be involved cos (I) might let someone down.”*

## 8 WELSH LANGUAGE PROVISION

We also wanted to understand some of the online experiences of Welsh speaking pupils, in relation to the Welsh language, and incorporated some extra questions to explore this with Welsh speaking pupils in the group interviews.

**We found that most used English as their main language online** including when searching online, and when posting status updates on *Facebook* etc. Similarly, most said their Facebook profiles/ Microsoft Office interfaces were set up in English, as they found the terminology easier to understand e.g. “log out”. However, some of the pupils (mainly the girls) added that they would ‘chat’ online with Welsh-speaking friends and family in Welsh e.g. when commenting on a photo that ‘Mum’ has posted. Another participant added that if he was playing on a multi-player server, and another player had written “Rwy’n Gymraeg” (“I’m Welsh”), he would then start to chat with that particular person in Welsh. It was clear that given the opportunity, they would interact in Welsh.

**When discussing searching for content online, many said that they did not find searching in Welsh as good.** One participant gave the example that Wikipedia in Welsh had less content than the Wikipedia in English. A few children mentioned that they had tried to use *Gwgl Cymraeg* as a search tool e.g. when researching a famous person, but they agreed that the number of responses were far fewer than “Google”. None of the boys had used “Wikipedia Cymraeg”. However one of the girls had used it, and found that there wasn’t as much information on it as the English version. Another girl explained that some of the teachers had asked them not to ‘copy and paste’ information from the Web, so they found it better to find the information in English, then translate it themselves to make it more ‘original’.

Many children also said **there wasn’t much Welsh content online for their age group**, listing just a few Welsh webpages they were aware of. Most knew of “Gwgl Cymraeg”, a few used “Wikipedia Cymraeg” (but none of the boys), and a few also mentioned S4C. They were all aware of “Google Translate” as well. There was mixed awareness of Welsh apps, with all pupils having heard of “Ap Geiriaduron” which they felt was useful. Most had heard of “S4C Clic”, and roughly half of the girls had heard of the app “Tag”,

but had not used it. No boys knew of it. The pupils were also unfamiliar with “Y Liff”, but some of the girls had heard of the app “Stwnsh” (but again had not used it). Almost half of the pupils had heard of “Dyma fi”, but had not participated.

**The children said they would like to see more educational and entertainment resources in Welsh.** They felt it was unfair that English-speaking pupils and schools had so much information available to them (web pages) without having to translate it. **They children were also not as aware of the Welsh language content that did exist.** For example, most agreed that they would like to see resources such as BBC Bitesize in Welsh, especially Science, indicating that they were not aware that these were already available in Welsh. One boy said he would also like to see more Welsh-medium audiobooks. Some of the girls said they would like to see more Welsh YouTube videos, as well as Welsh-medium documentaries (such as ‘Life Stories’). One girl explained that there was “nothing on TV for our age” and that they would love to see something like MTV in Welsh (“it would be really cool”). Talking about existing TV programmes, they said Rownd a Rownd didn’t really appeal to them, and that Tag was better suited to Year 6. One boy had tried the Welsh version of Minecraft a couple of times, but had not continued to use it. The girls added that they had seen a Welsh option on the Minecraft Pocket Edition called “Twyllwr Minecraft” which was some form of cheat option from Google Play.

## 9 REFERENCES

Byron Review Report (2008): Safer Children in a Digital World

<http://dera.ioe.ac.uk/7332/1/Final%20Report%20Bookmarked.pdf>

Björkqvist, K. 1994. Sex Roles, Vol. 30, Nos. 3/4, 1994  
Sex Differences in Physical, Verbal, and Indirect Aggression:  
A Review of Recent Research; Åbo Akademi University.

[http://www.vasa.abo.fi/svf/up/articles/sexdiff\\_a\\_review.PDF](http://www.vasa.abo.fi/svf/up/articles/sexdiff_a_review.PDF)

Cantwell, N. (1993) 'Monitoring the Convention through the Idea of the "3Ps"' Eurosocial report 45/1993:121-30, Vienna, European Centre for Social Welfare Policy and Research.

Coplin, D (1 July 2014). The Rise of the Humans: How to outsmart the digital deluge. Harriman House Publishing; 1st edition. Language: English. ISBN-10: 0857194054. ISBN-13: 978-0857194053.

Davies, T., Bhullar, S., Dowty, T. (2011). Rethinking responses to children and young people's online lives.

<http://www.lse.ac.uk/media@lse/research/EUKidsOnline/Conference%202011/Davies.pdf>

Davies, C. and Eynon, R. (2013). Teenagers and Technology. Routledge.

d'Haenens, L, Vandoninck, S and Donoso, V. (2013). *How to cope and build online resilience?* EU Kids Online, London, UK. <http://eprints.lse.ac.uk/48115/>

Digital Classroom Teaching Task and Finish Group:  
<http://wales.gov.uk/topics/educationandskills/publications/wagreviews/digital/?lang=en>

Duerager, Andrea and Livingstone, Sonia (2012) How can parents support children's internet safety? EU Kids Online, London, UK. <http://eprints.lse.ac.uk/42872/>

Government Edubase Website with School Data:  
<http://www.edubase.gov.uk/edubase/home.xhtml>

Find it, make it, use it, share it: learning in digital Wales:  
<http://wales.gov.uk/docs/dcells/publications/120328digitalen.pdf>

Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V., & Livingstone, S. (2011). *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries.* LSE, London: EU Kids Online.

Retrieved from: [http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20\(2009-11\)/EUKidsOnlineIIReports/D5%20Patterns%20of%20risk.pdf](http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20(2009-11)/EUKidsOnlineIIReports/D5%20Patterns%20of%20risk.pdf)

Hasebrink, U., Livingstone, S., Haddon, L., & Olafsson, K. (2009) Comparing children's online opportunities and risks across Europe: Cross-national comparisons for EU Kids Online. LSE, London: EU Kids Online. 2nd ed. At <http://eprints.lse.ac.uk/24368/>.

Helsper, Ellen and Eynon, Rebecca (2009) Digital natives: where is the evidence? British educational research journal. pp. 1-18. <http://eprints.lse.ac.uk/27739>

Hinduja, S. & Patchin, J. W. (2009). *Bullying beyond the schoolyard: Preventing and responding to cyberbullying.* Thousand Oaks, CA: Sage Publications.

Ito, M., Baumer, S., Bittanti, M., Boyd, D., Cody, R., Herr-Stephenson, B., Tripp, L., et al. (2010). *Hanging Out, Messing Around, Geeking Out: Kids Living and Learning with New Media.* Cambridge, MA: The MIT Press.

Ito, M., Gutiérrez, K., Livingstone, S., Penuel, B., Rhodes, J., Salen, K., Schor, J., Sefton-Green, J., Watkins, C. (2013) *Connected Learning: An Agenda for Research and Design.* Irvine, CA: Digital Media and Learning Research Hub.

Jenkins, Henry, Ravi Purushotma, Katie Clinton, Margaret Weigel, and Alice J. Robison. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century.* Chicago: The John D. and Catherine T. MacArthur Foundation.

Livingstone, Sonia and Bober, Magdalena (2005) *UK Children Go Online : final report of key project findings.* 6. London School of Economics and Political Science, London, UK. [http://eprints.lse.ac.uk/399/1/UKCGO\\_Final\\_report.pdf](http://eprints.lse.ac.uk/399/1/UKCGO_Final_report.pdf)

Livingstone, S, and Haddon, L (2009) *EU Kids Online: Final report.* LSE, London: EU Kids Online. (EC Safer Internet Plus Programme Deliverable D6.5)

Livingstone, S & Helsper, Ellen (2010) Balancing opportunities and risks in teenagers' use of the internet: the role of online skills and internet self-efficacy. *New media & society*, 12 (2). pp. 309-329. <http://eprints.lse.ac.uk/35373/>

Livingstone, S., Haddon, L. and Görzig, A. (eds) (2012). *Children, Risk and Safety Online: Research and Policy Challenges in Comparative Perspective.* Bristol: Policy Press.

Livingstone, Sonia and Kirwil, Lucyna and Ponte, Cristina and Staksrud, Elisabeth (2013) *In their own words: what bothers children online? with the EU Kids Online Network.* EU Kids Online, London School of Economics & Political Science, London, UK. This version available at: <http://eprints.lse.ac.uk/48357>

Livingstone, S. and Bulger, M.E. (2013). A global agenda for children's rights in the digital age: Recommendations for developing UNICEF's research strategy. Florence: UNICEF. Retrieved from <http://www.unicef-irc.org/publications/pdf/lse%20olol%20final3.pdf>

Livingstone, S., Haddon, L., Vincent, J., Mascheroni, G. and Ólafsson, K. (2014). *Net Children Go Mobile: The UK Report*. London: London School of Economics and Political Science. [www.netchildrengomobile.eu/reports/](http://www.netchildrengomobile.eu/reports/)

Mascheroni, G. and Ólafsson, K. (2014). *Net Children Go Mobile: Risks and Opportunities*. Milano: Educatt. [www.netchildrengomobile.eu/reports/](http://www.netchildrengomobile.eu/reports/)

Mitra, Sugata - Build a School in the Cloud TED2013 · 22:31 · Filmed Feb 2013  
[https://www.ted.com/talks/sugata\\_mitra\\_build\\_a\\_school\\_in\\_the\\_cloud?language=en](https://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud?language=en)

Ofcom Report: Children and Parents: Media Use and Attitudes (October 2014):  
[http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/media-use-attitudes-14/Childrens\\_2014\\_Report.pdf](http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/media-use-attitudes-14/Childrens_2014_Report.pdf)

Przybylski, AK., Mishkin, A., Shotbolt, V., Linington, S. (2014) *A Shared Responsibility: Building Children's Online Resilience*.  
<http://www.theparentzone.co.uk/sites/default/files/attachments/VM%20Resilience%20Report.pdf>

Review of Assessment and the National Curriculum for Wales  
<http://wales.gov.uk/topics/educationandskills/schoolshome/curriculum/wales/curriculum-for-wales/?lang=en>

Rheingold, H. (2012) *Net Smart*. MIT Press (Cambridge MA & London).

Staksrud, Elisabeth and Ólafsson, Kjartan and Livingstone, Sonia (2013) Does the use of social networking sites increase children's risk of harm? *Computers in human behavior*, 29 (1). pp. 40-50. <http://eprints.lse.ac.uk/45016/>

Stats Wales:  
<https://statswales.wales.gov.uk/Catalogue/Education-and-Skills/Schools-and-Teachers/Schools-Census/Pupil-Level-Annual-School-Census/Provision-of-Meals-and-Milk/PupilsEligibleForFreeSchoolMeals-by-School-Year>

The ICT Steering Group's Report to the Welsh Government  
<http://learning.wales.gov.uk/splash?orig=/resources/browse-all/ict-steering-groups-report/>

Third, Amanda, et al., 'Children's Rights in the Digital Age: A Download from Children Around the World', Young and Well Cooperative Research Centre, Melbourne, 2014.

Wesch, M. 2009. From Knowledgeable to Knowledge-able: Learning in New Media Environments. Kansas State University. In "New Media Technologies and the Scholarship of Teaching and Learning" January 2009 issue of *Filtered: The Academic Commons Magazine*. Edited by Randy Bass with Bret Eynon and an editorial group from Georgetown University's Center for New Designs in Learning & Scholarship.  
<http://www.colorado.edu/ftcp/research/documents/Wesch.pdf>

## 10 APPENDICES

### APPENDIX A: METHODOLOGY FOR QUALITATIVE AND QUANTITATIVE RESEARCH

#### Qualitative Research

There were two stages to the qualitative research:

- A set of eight group interviews held in four schools
- One-to-one formal, semi-structured interviews in the home with 24 pupils across Wales.

#### Preparation

Prior to the group interviews, the research team met for one day to establish the key areas that would be explored in the group interviews, and to help with the development of an interview guide for the group interviews.

#### Groups Interviews Process

WISE KIDS collaborated with four schools across Wales to conduct group interviews with a selection of their Year 9 pupils. Three schools were from different settings: urban, rural and sub-urban and a fourth school was a Welsh-English bilingual medium school set in a semi-rural setting.

WISE KIDS liaised with a named teacher in each of the four schools and the teacher was requested to identify and recruit ten pupils - five boys and five girls, of mixed ability, and who owned mobile phones and who had Internet access in the home – who together with their parent's consent - would be interested to participate in the group interviews.

To aid the process, WISE KIDS provided letters for the schools to give to parents of the pupils the named teacher thought would be suitable and interested to participate. These letters explained the research being undertaken, and sought both pupil and parental permission. In addition, the letters for parents explained that there was a possibility that their child could be selected for Stage 2 of the Research Study - the formal, semi-structured one-to-one home interviews.

In total the teachers from the four schools were able to recruit 34 pupils for the group interviews. Two schools had ten pupils each, whilst the other two schools had seven each. The researchers decided to split the group interviews by gender, as it was felt that the children were more likely to share their experiences in that format. There were therefore eight group interviews, carried out by three researchers. **These were carried out in Dec 2013.**

#### Rewards

All pupils who participated in the group interviews were provided with £5.00 Amazon vouchers.

#### Post Group Interview Analysis

Next the researchers involved in the group interviews analysed their findings and came together in a day-long meeting to discuss findings. From this process, the researchers selected six pupils from each school to participate in the one-to-one interviews: three boys and three girls, of mixed ability and from different socio-economic background determined through whether they had FSM (free school meals).

For one of the schools which only had four boys and three girls in the group interview, additional young people had to be recruited for the one-to-one research interviews due to the fact that two of the parents of the three girls did not want them take part in the one-to-one interviews, even though they met the criteria. Two additional female pupils who met the profile criteria for the one-to-one interviews were therefore recruited. The researchers contacted the parents of the newly recruited pupils directly and explained the research process, and provided them with the necessary letters and permission forms.

**Therefore the qualitative interviews involved 36 pupils in total.**

#### One-to-One Interviews

The in-depth interviews lasted approximately 1.5 hours and were carried out by researchers in the selected pupil's homes in January and early February 2014. In a few instances the parents sat in for these sessions. Notwithstanding whether parents sat in or not, we recognise a general limitation that as some of the questions asked the pupils about their personal experiences when using the Internet in a social and educational context, on occasion they may not have been as forthright as they could be.

## Rewards

All pupils who participated in the one-to-one interviews were provided with £10.00 Amazon vouchers.

## Post One-to-One Interview Analysis

The one-to-one interviews were analysed by the researchers individually before they were shared at a day long meeting of the research team. There the team drew out the key themes that were emerging. The notes from the day were photographed and collated.

## Online questionnaire

**The emerging themes from the qualitative interviews were used to inform the development of our detailed online quantitative questionnaire.**

WISE KIDS sought participation from a range of schools across Wales seeking a mix of urban, sub-urban and rural schools, from the South, Mid, East, West and North areas of Wales. A mix of English medium, Welsh Medium and Bilingual schools were sought. In total 24 schools were recruited. WISE KIDS liaised with a named teacher in each school to ask them to get as many of their Year 9 pupils to complete the questionnaire in school time as possible, once the questionnaire went 'live'. The teachers were sent a guidance brief explaining that they should allow up to 50 minutes for pupils to complete the questionnaire where possible, though it typically took 25minutes to complete. The teachers were asked to allow the pupils to choose which language they wanted to complete the questionnaire in (Welsh or English). They were also asked not to influence or guide the answers.

WISE KIDS also provided letters for the schools to give to parents of the pupils taking part in the online questionnaire, explaining the purpose of the research, and highlighting the fact that the questionnaire would

not collect personally identifiable information from the pupils like their name.

**Before the questionnaire was made live, it was tested in two iterative rounds with a small number of pupils to check that it was understandable and child friendly. A few refinements were made to the questionnaire before it was made live, and the link to it was made available to the named teachers in the participating schools.**

## Data Collected

In total approximately 2500+ questionnaires were submitted online. After checking the data sets for errors and answers that were anomalous, we had 2081 pupil respondents, aged 13 and 14 [1030 boys and 1051 girls] from Year 9 from a mixture of schools across Wales. More details on the data are provided in Table 1.2

## CRB Checks, Privacy, Disclosure

All researchers had CRB checks. For the group and one-to-one interviews, the researchers explained the process of the interviews as well as the privacy and disclosure agreements. They explained that all communication would be private and confidential, and only pseudonyms would be used in the report. However, in the instance of a disclosure, where a young person (or their friends) could be at risk of harm, the researchers explained that they would have to share this information.

Teachers were also reminded that there might be a possibility that a child completing the online questionnaire could decide to make a disclosure, and if so, appropriate school child protection procedures should be followed.

**Finally in connection to the online questionnaire, no names were collected to maintain pupil confidentiality.**

## APPENDIX B: RESEARCH TEAM

The team undertaking the work for WISE KIDS are:

### **Dr Sangeet Bhullar, Founder of WISE KIDS (Research Interviews, Research Strategy and Analysis, Report Writer and Editor)**



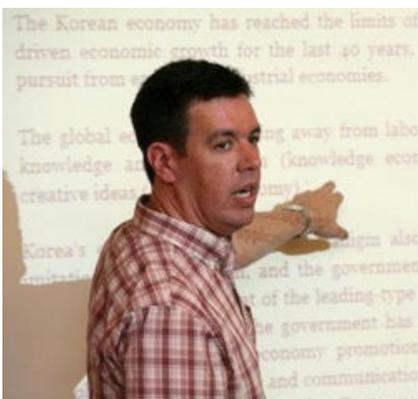
Dr Sangeet Bhullar is the founder of WISE KIDS (<http://www.wisekids.org.uk>), a non-profit company delivering training, consultancy, research and resource development in the areas of Digital Literacy, Youth Digital Citizenship, Digital Participation and Online Safety - in the UK and abroad. She has developed guidance, training programmes and spoken at conferences internationally. She also led the 'Generation 2000' Research Project on the Internet and Digital Media Habits and Digital Literacy of 13 and 14 year olds in Wales. Sangeet is a member of the Welsh Government Digital Inclusion Management Board, Wales Internet Safety Partnership (which she Chairs), the UK Council for Child Internet Safety and the Child Exploitation and Online Protection (CEOP) Education Advisory Group. She tweets as @sangeet.

### **Dr Ellen Helsper, Lecturer at London School of Economics (Research Strategy and Analysis, Report Editor)**



Ellen Helsper is an Associate Professor and Director of Graduate Studies in the Media and Communications Department at the London School of Economics and Political Science. Her research interests include digital literacy, the links between digital and social exclusion; mediated interpersonal communication; and quantitative and qualitative methodological developments in media and communications research. She consults industry, government and third sector stakeholders and is involved in the following cross-national research projects: EU Kids Online ([www.eukidsonline.net](http://www.eukidsonline.net)), From Digital Skills to Tangible Outcomes (<http://www.oii.ox.ac.uk/research/projects/?id=112>), the World Internet Project ([www.worldinternetproject.net](http://www.worldinternetproject.net)) and an EU study (EAHC-2011-CP-01) on the impact of online marketing on children's behaviour.

### **Dr Gareth Loudon, Senior Lecturer, Cardiff Metropolitan University (Volunteer Mentor, Research Strategy and Analysis, Report Editor)**



Dr Gareth Loudon is a Principal Lecturer at Cardiff Metropolitan University and co-founder and Director at the Centre for Creativity Ltd <http://www.centreforcreativity.co.uk>. Gareth's research interests focus on creativity and the innovation process, combining ideas from anthropology and psychology, engineering and design. Gareth has been active in academic and industrial research for the last 25 years and has also taken several research ideas all the way through to commercial products for companies such as Apple and AsiaWorks. Gareth has also worked for companies including Cegelec and Ericsson. Gareth has several patents and over 50 publications in total.

**Mr Richard Linington, Founder of Experience Research (Research Interviews, Research Strategy and Analysis)**



Richard Linington is an anthropologist by training and has been using ethnographic and user research tools for 15 years to provide insights and uncover the surface and latent needs of people. These needs are then projected forward to inspire clients and project teams to innovate and design solutions and prepare business strategies that focus on the target markets.

Richard has extensive experience of working in multi-disciplinary project teams and has worked with a range of clients including the Design Council, the Technology Strategy Board and Kodak. Find out more about Richard at: [www.experienceresearch.com](http://www.experienceresearch.com)

**Mrs Serena Davies, Part-time teacher at Ysgol Preseli (Research Interviews (Welsh Language), Research Strategy and Analysis)**



Serena is a Geography and Business Studies teacher who has taught at secondary establishments since 2002. She is passionate about developing Digital Literacy at schools, and founded "Prosiect eDdysg" (an eLearning Project) at Ysgol y Preseli in 2012. She has held numerous digital workshops for teachers from across Wales, as well as for NQTs, Digital Leaders and pupils. Most recently, Serena received the 'Highly Commended Award' for her Innovative Use of Digital Technology in the National Digital Learning Awards 2014, and is currently co-ordinating a BYOT roll-out for the 6th Form at Ysgol y Preseli. Most importantly, she is a wife, a mum of 3 'busy' young children, and a fluent Welsh speaker!

**Mr Huw Davies (Volunteer, Research Strategy and Analysis)**



Huw Davies is a former analyst programmer and teacher in the final weeks of his Web Science PhD. He has used a variety of qualitative and computer science research methodologies to investigate how young people from different social classes, ethnic and educational backgrounds use the Web to find out about and discuss their health and politicised issues such as climate change, conspiracy theories and immigration. He is also co-convenor of The British Sociological Association's Digital Sociology group.