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E–society and children’s participation: risk, opportunities, and barriersⁱ

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ABSTRACT

Children constitute an important group within policy discussion on information society issues, particularly in the context of digital learning opportunities and e-inclusion. However, their participation in e-society is also a cause for some public and policy concern. With ever-earlier adoption of new internet technologies and services by children, questions arise as to how to best ensure their protection whilst seeking to encourage positive online opportunities. A delicate balancing act is required to manage risks they may encounter while promoting greater participation online. To better inform this policy field, EU Kids Online conducted a pan-European survey of children’s use of the internet, resulting in the first fully comparable evidence base of children’s use of the internet in 25 European countries. Drawing on its findings, this chapter examines children’s participation in e-society and addresses the nature of online opportunities, the kinds of digital skills required and evidence of the risks young people may face on the internet. The chapter argues that greater attention to children’s perspectives on e-society is needed to foster greater online trust and participation.

INTRODUCTION

Children’s participation in e-society is a topic of policy interest for governments and educationalists the world over. While the internet was not designed with their needs in mind, children and young people have been to the fore in both developed and developing countries in adopting new information technologies and services. The World Summit on the Information Society (WSIS) declared that the participation of all young people was of crucial importance and that the development of Information and Communication Technologies (ICTs) and online services should be operationalized in a way that respects children’s rights and protects their well-being (WSIS, 2003). Extensive efforts have been made globally to promote the use of internet technologies in both formal and informal educational settings (Ito, 2008; OECD, 2012).

Harnessing the potential of ICTs to make the process of government more accessible and accountable to its citizens is one of the key features of the Information Society (Marsden, 2000). The focus of this chapter is on efforts within a European context to make the Information Society a reality for younger people (Commission of the European Communities, 2009). E-society, encompassing the full spectrum of society’s information and services, offers a vision of how citizens’ lives may be enhanced through the application of ICTs. Children, while an important constituency within this policy framework, often appear in incomplete and sometimes inconsistent ways. There is sometimes an assumption that all children are ‘digital natives’ (Prensky, 2001) – an influential trope wherein children born into the digital environment are assumed to have a greater facility for technological approaches to learning

and networked communications, apparently effortlessly outpacing ‘digital immigrants’ who struggle to adapt to a fast changing technology-saturated environment. Equivalent accounts of the ‘net generation’, ‘millennials’ or ‘screenagers’ provide powerful images of how tomorrow’s adult citizens will supposedly benefit from immeasurably improved processes of government, decision making and support for community needs (Calvert, 1999; Rheingold, 2002; Tapscott, 1999).

This chapter takes a more critical look at children’s relationship to e-society by examining the evidence about how they access, use and engage with opportunities online. Children are the subjects of many policies in relation to information society issues and as the adopters of new technologies are often seen in the vanguard of new modes of learning, engagement and participation in e-society (Rice, 2006). Yet, their participation is also subject to restrictions, and to many of the social, cultural and economic constraints that impact also on the adult world. In addition, children’s use of internet technologies is also the subject of considerable public anxiety and societal concerns about the implications of unrestricted access to information and services that were not necessarily designed for them (Livingstone, 2003). As such, children’s participation in e-society is a contested area, caught between the policy pillars of promoting the evident opportunities for learning, educational performance and communication and the need to protect young people against a host of online risks.

To date, children’s engagement with the information society has more often than not been the subject of idealized accounts of how it may enhance young people's lives but with relatively patchy empirical knowledge of how much young people do, or do not, participate in the online world. Arguably, the policy priority, particularly in the first decade of the internet’s existence, has been to enhance children’s access to the online world and to avoid the dangers of a digital divide (Becker, 2000; Bolt, 2000). Now, with growing awareness of the complexity of digital inclusion (Livingstone & Helsper, 2007) and a better evidence base concerning children’s use of internet technologies, there is greater appreciation of the need for evidence and ongoing research to support the potential that ICTs offer children and young people. In this context, the objectives of this chapter are to firstly, examine through analysis of findings from the EU Kids Online project how children access and use the many digital opportunities available to them; and secondly, to outline recommendations for policy regarding the quality of young people’s access to and experience of the internet. An evidence-based approach to policy, it is argued, is needed not just for addressing some of the more persistent problems associated with this domain but also essential for ensuring heightened digital participation in the future.

BACKGROUND

Since the recognition given by governments, industry and civil society stakeholders at the Geneva meeting of WSIS that children have a special place in the emerging Information Society (WSIS, 2003), international efforts have been instigated to promote better opportunities and protection for young people’s participation. The UN Convention on the Rights of the Child (United Nations, 1989) has been interpreted to underpin the importance of children’s access and participation to all forms of information and communication opportunities. As such, it has come to define some of the fundamental principles governing children’s and young people’s engagement with the online world. The Convention provides: the right to protection from all forms of sexual exploitation and abuse (Article 34); the right to privacy (Article 16); the right to an education (Articles 28 and 29) and the right to play and recreation (Article 31). The Convention also places special emphasis on children’s participation and highlights dimensions of their lives in which children’s active participation requires support. So, for example, Article 12 (the right to be heard in all matters affecting the child), Article 13 (the right to freedom of expression), Article 14 (the right to freedom of thought, conscience and religion), as well as Article 15 (freedom of association and assembly)

and Article 17 (the right to information) encapsulate the variety of ways media and information play a role in children's lives.

Internationally, the protection of minors has tended to be a dominant theme in relation to children's online participation as witnessed by the regulatory interventions made by governments around the world (UNICEF, 2011; OECD, 2011; OSTWG, 2010). In the European context, e-society policies under the European Commission's DG Information Society and Media have been designed to ensure Europe is a competitive knowledge economy that harnesses the benefits of ICT for all its citizens. Children's interests, including policies to protect young people from content that is potentially harmful for their development, have since 1999 been promoted through a series of dedicated safer internet action plans. Alongside early efforts to liberalise the market for technology and audio-visual services, measures to protect minors and combat the downsides of the internet were an important feature of the European audio-visual space. Arising from an EC Action Plan on promoting safer use of the internet in 1999 (European Commission, 1999), the programme has in successive phases promoted action against illegal content on the internet, and initiatives designed to minimise potentially harmful, though not necessarily illegal online content and contact (European Commission, 2003). Pre-eminent in this policy framework has been an emphasis on online child protection with a set of designated responsibilities on multiple stakeholders – industry, educators, civil society, regulators – to promote and protect children's safety (European Commission, 2006). Notably lacking in its early years was any commitment to research or knowledge enhancement of children's interests or perspectives.

EU Kids Online, a thematic network funded under the Safer Internet Programme, has sought to fill this research gap. The first task of the network was to survey the available empirical evidence. The network constructed a publicly accessible and fully searchable database of all empirical studies of children's use of the internet across Europe, once they meet a certain quality threshold.ⁱⁱ The database of nearly 400 studies was coded by country, topic, age of child, method, sample, etc. and classified according to the nature of the kinds of opportunities and risks studied. A typology of risks and opportunities mapped according to distinct categories of content, contact and conduct was developed, thereby recognising children as actors and participants as well as consumers of content, in need of protection. While this provided a guide to the most prominent risks and opportunities as identified within individual studies, what was lacking was data that could be compared across Europe. Furthermore, research informed by children themselves on their actual experiences was also lacking. Thus, the need was identified for a robust, pan-European survey of children's online opportunities and risks to inform Europe-wide policies, leading to the research conducted by EU Kids Online between 2009-2011 (Livingstone, Haddon, Gorzig, & Ólafsson, 2011).

BALANCING RISKS AND OPPORTUNITIES

As a pioneer in promoting safer internet policies from the mid-1990s on, European policy in the area of children's participation in the information society has attempted to balance the conditions for a free single market for audiovisual services and products with the promotion of safety awareness, codes of practice, as well as guidelines and measures to protect minors in the information age (Charlesworth, 2000; Tambini, Leonardi, & Marsden, 2008).

E-inclusion policies in Europe, from the Bangemann report onwards, including successive policy frameworks such as the i2010 initiative to the current Digital Agenda (European Commission, 2010), have framed the European Union's commitment to an information society for all. Fundamentally, this represents the longstanding commitment that Europe has made towards global leadership in ICT through massive investment in research as well as pioneering and implementing e-government services and applications for all citizens.

Alongside this, a host of legislative and regulatory measures exist beginning with the 1996 Green Paper on the protection of minors and human dignity (European Commission, 1996a) and the Communication on illegal and harmful content on the internet (European Commission, 1996b), and recommendations on the protection of minors (1996 and 2006) as well as the implementation of its multi-annual action plan on promoting safer use of the internet (European Commission, 1999). This wide ranging array of regulatory and policy formulation provides the underlying infrastructure across the European Union, codifying the principal instruments upon which digital safety and online child protection is promoted. The core pillars of this approach include self- and co-regulation, filtering and content classification, hotlines to report illegal content and awareness-raising strategies and education about internet safety. Beginning with priority actions dedicated to countering illegal online content, successive developments have seen greater attention focused on shared responsibility between stakeholders, on promoting greater awareness of security and safety issues, educating users to improve their skills and enhance their capacity to assume responsibility for their own safety.

Beyond Europe, this agenda has assumed a prominent role in discussions on current and future internet regulation. For example, the Council of Europe has promoted the public service value of the internet and the need to empower and support users online (Council of Europe, 2006). A Council of Europe study in 2006 did much to highlight the range of risks and harm online, reinforcing the need for balanced and proportionate policy responses (O'Connell & Bryce, 2006). Likewise, the International Telecommunications Union (ITU) as the sponsor of the World Summit on the Information Society (WSIS), has developed a global child online protection initiative seeking to ensure adequate provision in all members states for regulation, awareness-raising and education measures (ITU, 2009). In the same way, the safety of the internet has featured on the agenda in successive meetings of the Internet Governance Forum (IGF); digital safety has been adopted by UNICEF as an important priority, particularly within developing countries; and has been incorporated within broader debates on media and information literacy as promoted through UNESCO (UNESCO, 2011).

What this indicates is that children, perhaps in contrast to other areas of public life, have not been invisible when it comes to e-society. Children, indeed, are often foremost in policy considerations, just as they are in the vanguard of adoption of new internet services and devices. What has been notably absent, however, is a robust evidence base upon which to build better policy, inform the fraught nature of the public debate about children on the internet, and to guide the evaluation of measures which are in place.

CHILDREN'S USE OF THE INTERNET

Between 2009 and 2011, the EU Kids Online network designed and conducted a major quantitative survey of 9-16 year olds' experiences of online use, risk and safety in 25 European countries. The purpose of the survey was to provide a rigorous evidence base to support stakeholders in their efforts to maximise online opportunities while minimising the risk of harm associated with internet use. Adopting an approach that was child-centred, comparative, critical and contextual, a face-to-face survey was conducted in homes of 9-16 year old internet users, with their parents from 25 countries across Europe. A feature of the survey was its focus on children themselves, thereby gaining a direct account of their online experiences. Two rounds of cognitive testing were undertaken, in addition to piloting, to thoroughly check children's understandings of and reactions to the questions.

A total of 25,142 children and their parents were interviewed during 2010. Random stratified survey sampling of some 1000 children (9-16 years old) per country who use the internet was carried out. In each country, samples were stratified by region and level of urbanisation and addresses selected randomly. The child interview was conducted face-to-

face, with a self-completion component for the sensitive questions on online risks as well as the interviewer-administered one. The questionnaires were developed by EU Kids Online with guidance from Ipsos MORI.

The focus of the study was on specific risks identified in the literature and followed a path through the context of uses and activities online through risks encountered, focusing ultimately on the outcomes for children, particularly those who are adversely affected or harmed. In so doing, however, the survey provides a unique perspective on how children across Europe are participating in online activities, which opportunities they are pursuing and what kinds of challenges they face in their day to day use of internet technologies and ICTs. Select results are presented below with full findings available in project reports and further network publications (Livingstone, Haddon, & Görzig, 2012; Livingstone, Haddon, Görzig, & Ólafsson, 2011).

Findings from the EU Kids Online survey sought to locate children's use of the internet within the context of three intersecting spheres that included: European society and policy, childhood and family life, and the ever-changing technological environment in which use of the internet is experience. The study provides some of the first fully comparable evidence of the degree to which online activities are embedded in European children's everyday lives (S. Livingstone, et al., 2011). Key findings in relation to access, use and activities, opportunities as well as risks act as important indicators of children's digital participation in e-society and point to areas where blockages may occur. Children's use of the internet is understood to vary according to the location and technology used for going online; the digital skills the child has at his or her disposal; the socioeconomic status (SES) of their household; in addition to child's age, gender and, of course, country.

Changing Modes of Access

Determining just how many children in Europe are online is itself a challenge. Eurobarometer in 2008 estimated that on average 75% of children across Europe were online: just three countries (Italy, Greece and Cyprus) were below 50%, while in six countries (Finland, Netherlands, Estonia, Denmark, Sweden and the UK), over 90% of children used the internet (Eurobarometer, 2008).

EU Kids Online surveyed internet-using children within each of 25 countries in Europe.ⁱⁱⁱ Of this population, EU Kids Online found in 2010 that 87% of children went online at home. While there is growing variation in how children access the internet, it is interesting to note that the home environment remains the most important location for internet use. However, as Table 1 shows, access is now increasingly diversified across a range of other connected devices. Alongside the shared PC that has been the mainstay of domestic access to the internet, own PCs, laptops and other connected devices in the home – as well as outside the home – now allow for internet use. EU Kids Online found, for instance, that just under half of children (49%) in Europe go online from the privacy of their own bedroom. While age, socio-economic and national variations exist, the fact that such large numbers have more or less privatised access suggests that the mode of internet access is rapidly changing and that the traditional advice to parents of supervising their children's internet use through keeping the home PC in a public place, needs to be augmented.

Table 1: Devices through which children access the internet

% children who use the internet	%
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Shared PC	58
Own PC	35
Television set	32
Mobile phone	31
Games console	26
Own laptop	24
Shared laptop	22
Other handheld or portable device (e.g. iPod Touch, iPhone or Blackberry)	12
Average number of devices of use	2.5

QC300a-h: Which of these devices do you use for the internet these days?

(Multiple responses allowed)

Base: All children who use the internet.

The internet, as the above findings reveal, is now increasingly accessed by some form of mobile device. As children are often early adopters of new technologies, it is perhaps not surprising that mobile use is very prevalent in some countries. Most children (58%) do still access the internet via a shared personal computer (PC), although access via their own PC is the next most common (35%). Mobile access is a growing trend: smart phones are used by 12% on average and 31% go online via their standard mobile phone. While these represent averages for 25 countries in Europe, variations by age, SES and country must be acknowledged and underline the fact that internet access for children is not the same for all children in all locations.

Another dimension that points to the degree of embeddedness of the internet in children's lives is the frequency and amount of daily use. Going online everyday, it may be assumed, is required for communication activities and maintaining online relationships. Figure 1 presents EU Kids Online findings for daily use and shows that 60% of children were found to use the internet every day or almost daily and 93% go online at least weekly. In general, children across Europe spend 86 minutes online in an average day. SES matters especially for daily use: 67% of children from high SES homes are daily internet users compared to 52% from lower SES homes. Age also matters for daily use: just a third of younger children (9-10 years of age) compared to 80% of 15-16 year olds go online.

Figure 1: How often children use the internet

[figure]

QC303: How often do you use the internet?

Base: All children who use the internet.

Finally, it is also clear from findings of the survey that the age at which children first go online is steadily declining across Europe. The average age reported for first internet use is 9 years. Yet, within this age range there is variation: children in the 15-16 age group reported that they were 11 when they first used the internet while 9-10 year olds were 7 on first internet use.

Classifying Activities

What is it that children do online and which activities may be seen as representing engagement or participation in e-society? In its survey, EU Kids Online asked about 17 different kinds of activities including a range of learning, communication, entertainment and creative activities. Overall, use of the internet for schoolwork was found to be highest of all activities. This was closely followed by entertainment-oriented activities such as watching video clips online and communicating online, reflecting the wide number of social activities that are conducted online. More creative activities such as uploading content, writing a blog or spending time in a virtual world were found to be less frequent.

Children's online activities – as with opportunities – can be categorised under the separate headings of content-based activities (using the internet for information retrieval, reading/watching the news etc.); contact/communication-based activities (using instant messaging, social networking, visiting a chatroom); and conduct/peer participation activities (creating and posting content, writing a blog). It is the latter, more socially-engaged activities that are of most interest from the point of view of encouraging children's participation in e-society. In all, there is evidence of considerable breadth in children's internet use, with younger children doing on average over five activities and teenagers doing eight or nine activities. As earlier research has suggested (Livingstone & Helsper, 2007), these findings support the 'ladder of opportunities' hypothesis that suggests that certain basic activities tend to be done first, and by most children. More creative or participatory activities come later, and are undertaken by fewer children.

Hasebrink et al. (2011) identify some of the key underlying trends, revealing distinct patterns or user types that help identify children's contrasting modes of online participation (Hasebrink, Görzig, Haddon, Kalmus, & Livingstone, 2011). Six main groups, increasing in age and mix of activities, have been identified as follows:

i) *'Low use/learning oriented'*. This group includes many younger children, and averages 11.4 years old. They use the internet rather little, focusing mainly on schoolwork, watching video clips and reading/watching the news. Few have an SNS profile and engage in few risky online activities. Although they encounter few online risks, when they do, they tend to be upset.

ii) *'Low use/social networking site oriented'*. Also relatively young (average 11.5 years), this group is less likely to use the internet for schoolwork or news and more likely to use SNS. They also encounter online risks though they tend not to find these upsetting.

iii) *'Moderate use'*. A bit older than the first two groups at 13.1 years on average, these children spend more time online and have a much wider range of activities. They too are more likely to encounter online risks.

iv) *'Diverse and risky opportunities'*. Averaging 13.4 years old, these children spend almost two hours a day online and undertake the widest range of activities, including some more advanced and creative activities on the ladder of opportunities. They also engage in more risky activities online. Although not the oldest group, they encounter the most risk online but are the least likely to be upset.

v) *'High use/entertainment oriented'*. These children are older (average 14 years) and more often boys. They are online for most minutes per day (201 minutes on average)

and participate in a fairly wide range of activities. They like playing games against the computer and watching video clips, and they do relatively little schoolwork, news or creative activities. Their exposure to risk is quite high, and some use the internet excessively.

vi) *'Focused social web use'*. This is the oldest group within the sample (average 14.2 years), with more girls than boys, and they use the internet for longer, doing more activities, than the average. They are unlikely to play games online, but are the most likely to use SNS. They also read/watch news, use instant messaging, post photos or music and write blogs. Their online risk encounters are similar to groups 4 and 5 but they report slightly higher levels of upset.

Ladder of Opportunities

The general classification of children's online activities under general headings such as: communication activities (using IM, visiting SNS sites, emails and chatrooms); creative uses (created characters, posting photos or messages on a website); gaming (playing online games, watching videos online); and learning activities (using the internet for schoolwork, reading watching the news) is consistent with the 'ladder of opportunities' approach (Hasebrink, et al., 2011). This accounts for children's development of digital skills and uses through an increasing range of activities, varying in composition and complexity that rises with age and displays an underlying disposition to certain kinds of online behaviour. In keeping with earlier accounts of how digital opportunities are pursued (Livingstone, Bober, & Helsper, 2005), it illustrates how children advance through a series of graduated steps starting with the most basic activities and progressively taking on more skilled, complex and creative opportunities.

The ladder of opportunities is an idealised map of how children can learn and develop in experience of the online world through graduated steps of increasing complexity.

Step 1 – common to all children - is when children first go online and use the internet for schoolwork and playing games alone against the computer.

Step 2 in addition to schoolwork and games, adds watching video clips online (e.g. YouTube). These are all ways of using the internet as a mass medium – for information and entertainment. Notably, a third of children in some countries (Ireland, Austria, Greece, and Turkey) do just these activities.

Step 3 involves using the internet interactively for communication (social networking, instant messaging, email) and reading/watching the news. Half of children in Ireland, Austria, Germany, Greece, Italy, Poland and Turkey only reach this step.

Step 4 includes playing with others online, downloading films and music and sharing content peer-to-peer (e.g. via webcam or message boards). Children in Sweden, Lithuania, Cyprus, Belgium and Norway are most likely to reach this step.

Step 5: Only a quarter of children reach the fifth, most advanced and creative step. This involves visiting chatrooms, file-sharing, blogging and spending time in a virtual world.

From a policy point of view, important implications of this analysis arise in relation to the range and extent of opportunities available to children in any particular country as well as barriers that may exist to the development of digital literacy and creativity. For instance, EU Kids Online identified that most children across Europe accomplish the most basic steps

of using the web as an informational tool in school and for passive entertainment uses such as watching video clips. However, diminishing numbers of children progress to higher order activities, whether that includes interactive and communicative functions, including social networking, or more demanding participative activities such as blogging, spending time in a virtual world and creating online content. For instance, only a quarter of all children reach the final step with the most sophisticated activities, yet a third of children achieve this in countries such as Sweden and Slovenia. By contrast, more children in countries such as Ireland, Italy, Poland and Turkey appear not to progress beyond informational and communicative functions and never engage with creative applications. The 'ladder of opportunities', therefore, has a quite different shape in different countries across Europe, requiring a targeted response to promoting educational and digital literacy initiatives.

Digital skills

The range of activities reported by children, a crucial dimension of participation in e-society, is one indicator of the underlying skills possessed by children. Children were also asked in the EU Kids Online survey to self-report (11-16 year olds only) on how many of 8 digital safety skills they could perform. Findings in Figure 2 show that children can perform on average just 4 of the 8 skills asked about. Teenagers in general are more skilled and notably 11-12 year olds appeared to lack basic skills such as changing privacy settings on a social networking profile, comparing information from different websites, blocking unwanted content or messages or changing filter preferences. Boys claim more skills. Most skills (over four) were reported in countries such as Finland, Sweden, the Netherlands and Estonia. Least skills (less than three) were reported in Hungary, Romania, Italy and Turkey.

Figure 2: Children's digital literacy and safety skills, by country (age 11+)

[insert Figure 2 about here]

QC320a-d and QC321a-d: Which of these things do you know how to do on the internet?

Base: All children aged 11-16 who use the internet.

In another question, children were asked how true it was of them that "I know a lot more about the internet than my parents". In this instance, responses were mixed. In almost equal numbers, one third said that it was 'very true' of them, one third 'a bit true' and a further third 'not true'. Digital skills clearly follow age with younger children generally less confident (only 13% 9-10 year olds said it was very true) while over half of older teenagers said it was very true of them.

In terms of children's digital literacy and safety skills, optimistically, one can argue that the majority of 11-16 year olds can manage most of the specific skills we asked about. Moreover, one third are very confident, and a further third are a bit confident that they are the generation that knows a lot about using the internet, especially compared with their parents.

However, less positively, one third say it is not true that they know more than their parents about using the internet. Further, of the eight relatively basic skills asked about, on average children can only do four of them; more than four in ten do not know how to block messages, bookmark sites, find safety information, change privacy settings or determine whether websites are reliable.

Negative Online Experiences

While online activities and digital skills are indicators of how children engage in e-society, these experiences are not always positive. In its research, EU Kids Online found that young people were exposed to a wide range of risks which included exposure to sexual images, bullying, sexual messaging ('sexting') and meetings with strangers. In addition, harmful user generated content (such as suicide sites, hate speech and sites promoting anorexia or self-harm) as well as personal data misuse were also cited as further risk factors encountered by many young people. When asked in a general sense if they felt there were things on the internet that would bother children their age, over half of all children (55%) said this was the case. Fewer numbers reported that they themselves had been bothered by something online (12%). When the question was put a slightly different way ('there are lots of good things on the internet for children my age'), the responses again show an interesting mix across Europe (see Figure 3).

Figure 3: “There are lots of things on the internet that are good for children of my age”, by country

[insert Figure 3 about here]

QC319c: There are lots of things on the internet that are good for children of my age. Response options: very true, a bit true, not true.

Base: All children who use the internet.

Somewhat less than half (44%) agree that there are good things on the internet for children their age. 10% on average disagree, with a large proportion (46%) equivocal on the matter. The variation across Europe is interesting. The most satisfied (over 50%) are a heterogeneous group of countries (Portugal, Cyprus, Austria, UK, Czech Republic, Hungary, Bulgaria, Greece and Lithuania) combining a wide range of linguistic communities with a variety of levels of provision for online content for children. By contrast, countries traditionally strong in child-oriented content, such as Norway and Sweden, are the least satisfied. Several large language communities including France (34%) and Spain (42%) are less than satisfied and point to an urgent need to develop better opportunities and more dedicated content for children in these countries.

While cross-country comparisons are beyond the scope of this chapter, it is clear that a diverse range of experiences, histories and development trajectories with regard to e-society are in evidence across Europe (Lobe, 2011). For the purposes of analysis, EU Kids Online looked at the two dimensions of levels of use (numbers of activities, time spent online etc.) and experiences of risk in developing a classification of countries (using axes of lower and higher levels of risk; lower and higher levels of use). Higher use, higher risk countries include several wealthy Nordic countries as well as some East European countries while lower use, lower risk countries (Spain, Ireland and Portugal, for example) typically have lower than average usage levels with low to moderate levels of risk. National factors become particularly important in identifying the specific areas of risk and opportunity that require targeted policy attention.

In considering reports of risk experiences among young people, it must be remembered that risks and opportunities on the internet go hand in hand. As children explore more and gain better access to the internet, they inevitably encounter or engage in riskier forms of activity. The relationship between risks and online activities is highlighted in Figure 4, whereby the more children do online, they more risks they encounter. Countries with fewer online activities such as Ireland and Turkey encounter the fewest risks, or may be seen as more risk-averse, whereas those with the most online activities (Estonia, Lithuania, Sweden and Czech Republic) have the highest number of risks. Interestingly, some countries have

succeeded in promoting online opportunities while not increasing the overall exposure to risk but this is an ongoing challenge faced by all countries.

Figure 4. Risks and online opportunities (Livingstone et al 2011)

[insert Figure 4 about here]

However, a fundamental distinction must be drawn between risk and harm. Not all children who encounter risks are actually harmed by the experience. In the EU Kids Online survey, while over half of all children perceived that there were harmful things on the internet, just 12% reported they had themselves been upset or bothered by something online. In addition, there is much evidence in the literature to support the view that risk is an essential part of children's learning and development and central to building resilience against negative online experiences (Livingstone, et al., 2012; Staksrud, 2012). A policy priority, therefore, is to target resources towards those most likely to be adversely affected, such as younger or more vulnerable children, while developing programmes of awareness-raising and digital skills development to promote greater resilience for the majority of children who use the internet.

DISCUSSION

Recent developments in the policy framework for online safety have begun to emphasise the need to create not just a safer but also a better internet (European Commission, 2012). Alongside measures to enhance safety and online child protection through mechanisms such as parental controls and filters, there is a recognition that better resources and opportunities need to be created for young people. This, in the view of the European Commission, can be achieved through engaging industry and other public agencies in the creation of positive content and more targeted learning resources. European internet policy, in particular, has placed a strong emphasis on fostering greater confidence in the safety of the online world for children as part of overall trust reinforcement in the internet (Kroes, 2011) and in this way, continues to place a major emphasis on promoting children's participation in e-society (European Commission, 2007). The emphasis of policy in this field is on shared multi-stakeholder responsibility with implications for a number of policy actors within the overall environment in which children engage in the online world. Here, four main points are presented insofar as they address barriers to e-participation and impact on improving the quality of children's online engagement.

First, the 'ladder of opportunities' as presented in findings of EU Kids Online provides a valuable heuristic for identifying the range of opportunities available to children and young people in varying conditions of accessibility. The comparative dimension here is important, as social, cultural and economic factors continue to impact strongly on how far children progress in terms of kinds of opportunities and in levels of digital skills. There is a parallel here between digital opportunities for children and levels of digital literacy overall. With increasing recognition of the need for robust indicators of information literacy more generally (ITU, 2010; UNESCO, 2011), there is an opportunity here to include children's digital opportunities and skills acquisition as a core component of societal development towards the Information Society.

Second, the overall perception of the quality of online content, and particularly on the part of younger users (who were the least satisfied with the available online provision) provides a timely reminder of the need for new public provision in this area and the need to develop new content targeted to young people's needs. This is a finding that the European

Commission has already taken up with the establishment in 2010 of a “European Award for Best Children’s Online Content” as well production guidelines for websites and online content for younger users (Reese, Petito, & Pijpers, 2010). This is a valuable step, but high profile national initiatives supported by the large media producers and broadcasters, who often host the most popular content, should also be promoted. More generally, the needs of younger users need to be taken into account. As more and more children go online at ever-younger ages, rethinking the nature of content provision and support for participation needs to be undertaken highlighting the possibilities for advancing children’s learning and engagement as young citizens (Livingstone, 2009).

Third, a key dimension that emerges from research findings is that socio-economic divides remain a persistent barrier in terms of promoting equality of inclusion in e-society (Helsper, 2012). While digital divides do not necessarily appear across ‘digital-haves’ and ‘digital-have nots’, there are significant differences in the quality and degree of access enjoyed by different groups in different countries. The persistent issues of digital divides, and socio-economic factors in determining inequalities of access and opportunity need to be addressed. For children who lack convenient broadband access, for instance, governments should ensure that digital exclusion does not compound social exclusion. It is important that while all should benefit from public information resources, special efforts are needed to ensure these reach the disadvantaged or information-poor.

Finally, perhaps the most important major gap in current approaches to the digital landscape for children is any systematic provision for fostering digital citizenship (Mossberger, Tolbert, & McNeal, 2008). Given the rapidly changing nature of the technologies involved, the emerging applications which pose new challenges of their own, and that direct parental supervision is much less relevant to children’s online usage, a key priority is to encourage children themselves to be responsible for their own behaviour and safety as much as possible. Fostering participation requires a focus on empowerment rather than restriction of children’s usage (O’Neill, Livingstone, & McLaughlin, 2011), emphasising responsible behaviour and digital citizenship, treating children as a competent, participatory group encouraging self-governing behaviour. As such, children and young people should be recognised within the context of information society policies as active agents on the internet with a responsibility to promote safer and better practices, as well as rights holders with an expectation of support for online participation.

CONCLUSION

This chapter has presented a European perspective on the participation of children and youth in e-society. Globally, this is now a subject of heightened importance as governments seek to increase their competitiveness through greater investment in the knowledge economy and encourage better take up of online opportunities. Children as the early adopters of new technologies and services as well as being the future generation of skilled ICT users, are therefore of singular importance to the success of e-society policies. As discussed in this chapter, efforts to develop greater involvement of children have sometimes faltered between competing objectives of ensuring effective protection of young people in an environment that was not designed for their needs and promoting wider participation. European policies in this area have sought to develop a balanced approach through better knowledge of the risks and opportunities that young people face and through an approach that fosters self-regulation both on the parts of providers and users.

Findings of the EU Kids Online survey provide a robust evidence base for this policy approach. Important implications of the study’s findings are that it is harm rather than risk that needs to be targeted in policies designed to protect minors in the online space and that promoting opportunities and wider participation in e-society needs to take account of the

diverse activities that children themselves engage in. Using the ladder of opportunities as a framework for assessing the breadth of young people's levels of engagement in online activities provides useful cues for policy makers on the kinds of participative and productive activities that need to be emphasised more in both formal and informal learning settings. Here, public agencies can support this effort by the provision of more and better content, given children's evident frustration with the quality of resources for their age group. However, one of the most important implications is the need to further develop and resource support for digital citizenship if e-society is to be a meaningful construct for younger generations.

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ⁱⁱ This 'Data Repository' is online at www.eukidsonline.net

ⁱⁱⁱ EU Kids Online conducted a face-to-face, in home survey of 25,000 9-16 year old internet users and their parents in 25 countries using a stratified random sample and self-completion methods for sensitive questions. Full findings of the survey are published in Livingstone, S., Haddon, L., Görzig, A. & Ólafsson, K. 2011. Risks and safety on the internet: The perspective of European children. Full Findings. LSE, London: EU Kids Online. The countries included were: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Turkey, UK.