DÁIL ÉIREANN

AN COMHCHOISTE UM LEANAÍ AGUS GNÓTHAÍ ÓIGE

JOINT COMMITTEE ON CHILDREN AND YOUTH AFFAIRS

Dé Céadaoin, 27 Meán Fómhair 2017 Wednesday, 27 September 2017

Tháinig an Comhchoiste le chéile ag 10 a.m.

The Joint Committee met at 10 a.m.

Comhaltaí a bhí i láthair / Members present:

Teachtaí Dála / Deputies	Seanadóirí / Senators
Denise Mitchell,*	Máire Devine,
Tom Neville,	Joan Freeman,
Sean Sherlock.*	Catherine Noone.

^{*} In éagmais / In the absence of Deputies Jan O'Sullivan and Donnchadh Ó Laoghaire.

Teachta / Deputy Alan Farrell sa Chathaoir / in the Chair.

JCYA

Business of Joint Committee

Chairman: Apologies have been received from Deputy Lisa Chambers. I have been informed that Deputy Denise Mitchell will be substituting for Deputy Donnacha Ó Laoghaire and that Deputy Sean Sherlock will be substituting for Deputy Jan O'Sullivan. I welcome both Deputies to the meeting. We will hear this morning from representatives of Hotline and Webwise on cybersecurity with reference to children and young adults. However, as I wish to first deal with a number of housekeeping matters, the committee will go into private session. Is that agreed? Agreed.

The joint committee went into private session at 10.15 a.m. and resumed in public session at 10.28 a.m.

Cybersecurity for Children and Young Adults: Discussion

Chairman: I thank the members and our guest for attending this morning to discuss the issue of cybersecurity. I welcome Mr. Simon Grehan and Ms Jane McGarrigle, who are both project officers at the Professional Development Service for Teachers, PDST, and Mr. Tony Weir, senior inspector in the Department of Education and Skills. I thank the witnesses for appearing before the committee.

I draw the attention of witnesses to the fact that by virtue of section 17(2)(l) of the Defamation Act 2009, they are protected by absolute privilege in respect of their evidence to the committee. However, if they are directed by the committee to cease giving evidence on a particular matter and they continue to so do, they are entitled thereafter only to a qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and they are asked to respect the parliamentary practice to the effect that, where possible, they should not criticise or make charges against any person, persons or entity by name or in such a way as to make him, her or it identifiable.

Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the House or an official either by name or in such a way as to make him or her identifiable. I ask members to switch off their mobile phones off because they interfere with the broadcasting systems, which makes it difficult for people watching outside of the room to keep up with us. Flight mode is also acceptable. I advise witnesses that any submission or opening statement will be published on the committee website after this meeting. I understand the witnesses wish to make a short presentation. We will then invite members to put questions to the witnesses. We will begin with Mr. Weir.

Mr. Tony Weir: I thank the committee for its interest in this important area and for the opportunity to raise awareness around it. I will introduce the team that will provide information on the topic of cybersecurity for children and young adults. I am a senior inspector with the Department of Education and Skills. As part of my responsibilities, 50% of my working duties are allocated to providing support to the teacher education section of the Department specifically around the area of the digital strategy for schools. I am accompanied by my colleagues, Ms Jane McGarrigle and Mr. Simon Grehan from the PDST. Both Ms McGarrigle and Mr. Grehan have worked extensively with the Webwise project, which is overseen by PDST-Technology in

Education, PDSTTIE, which is part of PDST. PDSTTIE promotes and supports the integration of ICT in teaching and learning in first and second level schools. PDST is managed by the Dublin West Education Centre and is funded by the teacher education section of the Department. Mr. Grehan will now make a brief opening statement to the committee outlining the work of the Webwise project and its role in promoting the safer and more effective use of the Internet by children in Ireland through a range of awareness raising actions.

Mr. Simon Grehan: Webwise is an initiative of PDST. We are co-funded by the European Commission and the Department's teacher education section. We are part of the Safer Internet Ireland consortium, which is a project offering helpline, hotline and awareness raising actions under the co-ordination of the Department of Justice and Equality's Office for Internet Safety. We are also a member of a pan-European network called the Insafe network, where we share resources and best practice with similar organisations in 27 countries around Europe.

Our approach is schools are best placed for reaching the majority of children, regardless of age, income or background. The focus of our awareness actions is to provide relevant support to schools to build their capacity to promote safer, more effective use of the Internet by children. We do this by working with teams within the professional development service for teachers to integrate the appropriate Internet safety content into supports provided to schools in continuing professional development and in-school supports. We also support schools in the development and updating of the appropriate policies that relate to children's use of technology, particularly Internet acceptable use policies. One of our key actions around increasing capacity in the system is to develop curriculum resources that can be used by teachers in classrooms to address key issues around children's use of the Internet as part of the social, personal, health and education curriculum at both primary and post-primary levels. For example, we have produced the My Selfie resource, which teachers can use for fifth and sixth class pupils to address the issue of cyberbullying as part of the implementation of the curriculum. Similarly, there is a Lockers resource, which is an equivalent resource for addressing the issue of "sexting" or the non-consensual sharing of intimate images as part of the junior cycle social, personal, health and education curriculum. Resources in this area also support school leaders in addressing incidents of sexting in schools and updating their policy, as well as informing them of the legal framework in this area.

One of our key actions is to provide information, advice and tools to parents and teachers through digital channels, especially our website, www.webwise.ie. In the past year we have had more than 1 million visitors to this website. The key focus of our awareness raising activities every year is Safer Internet Day, an event in February where we try to get focus from stakeholders and schools on issues around children's use of the Internet through hosting stakeholder-led, teacher-led and youth-led activities. This year, 420 schools and 75,000 children throughout the country participated. There were 281 media items covering actions on that. We also run social media campaigns targeting children directly with messages that echo and reinforce the messaging they get as part of the education programmes. It is important children receive these messages in the online communities where they spend their time as well as in the classroom. All the work we do is supported by a youth advisory panel comprising 30 young people between the ages of 12 and 18 from around the country.

Chairman: I welcome Ms Niculescu and thank her for attending this morning. I invite her to make her opening statement.

Ms Ana Niculescu: I am grateful to be here today to brief the committee on behalf of the Internet Service Providers Association of Ireland, ISPAI, in respect of cybersecurity for chil-

dren from a *hotline.ie* perspective. The *hotline.ie* mission is to provide Internet users residing in Ireland with a free, secure and confidential reporting service where they may report suspected illegal content, particularly child sexual abuse imagery. We also look to ensure child sexual abuse imagery is notified to law enforcement, irrespective of jurisdiction. When it is hosted in Ireland, we want to ensure it is swiftly removed from ISPAI's member facilities by providing those members with qualified notice for takedown, allowing them to preserve evidence for law enforcement investigation.

It is worth mentioned that *hotline.ie* is funded by ISPAI members and it is also in receipt of grant aid support from the European Commission. At national level we work with the Garda and the Internet industry, and our procedures are overseen by the Department of Justice and Equality and the Office for Internet Safety. At international level we work with 51 other Internet hotlines in 47 countries worldwide which come together under the umbrella association INHOPE. We also work with Europol and Interpol.

The committee might notice I have used the term "child sexual abuse imagery" instead of the legal term "child pornography". In our line of work, when dealing with potentially criminal content, accuracy is instrumental. Therefore, we prefer to use the term "child sexual abuse imagery" as each image is documented evidence of a crime being committed, a child being sexually exploited and, in many cases, actually raped. Child sexual abuse is a global issue that requires a global co-ordinated response, and to tackle it, a multi-stakeholder approach, where everybody has a role to play in the process, from government to law enforcement to the Internet industry and civil society by reporting content to the hotline.

On my way here this morning, the terms "cybersecurity for children" and "prevention" kept popping into my mind. More often than we would like to admit, we fall victim of one-dimensional or, at most, two-dimensional problem-solving traps. The committee should bear with me. I have attended numerous international conferences, workshops, round-table discussions and presentations, but when it comes to child sexual abuse, the reality is most of our actions are reactive. A child would have already been groomed and sexually abused, and sexually explicit selfies would have been produced and shared. A viewer would already have crossed the line and begun to experience arousal from sexual images of children.

Child sexual abuse has been a reality for many years and I dare say technologies are neither good nor bad but people are. Somehow I feel there is an aspect of this problem that is often unspoken, and that is the offender. Too little research is available, which in turn prevents detection of harmful behaviour and opportunities for early intervention. We are still only exploring what access providers should do and children or parents could and should do. I am not saying what is being done is wrong or unnecessary but rather that perhaps the approach is incomplete.

In 18 years of operation, *hotline.ie* has received more than 50,000 reports of suspected child sexual abuse imagery. I emphasise that one report could consist of tens or hundreds of images and videos. Of those 50,000 reports, 10% were confirmed by the hotline as child sexual abuse imagery. This translates to one case per day for 18 years. My question is would we not want to know we are doing everything that can be done to prevent this heinous crime from happening.

In a way, our line of work dealing with potentially criminal content is much easier as we have clear criteria set in legislation and procedures set by the Department of Justice and Equality and the Garda. In a nutshell, the work is straightforward as the content is either legal or illegal. However, instigating behaviour change - educating and preventing things happening - is far more challenging. *Hotline.ie* and all our counterparts worldwide that matter deal with the

distribution of online child sexual abuse at source. Why would we not apply the same principle to prevention? Having viewed child sexual abuse imagery as *hotline.ie* manager, there is not a day that passes where I do not think about the work that we do, how we could improve it and making sure that we are still fit for purpose and at the forefront of the fight against child sexual abuse imagery. I also consider how we can assist law enforcement in its efforts to identify victims.

As a closing remark, I would like to address two aspects to strengthen and reinforce the position of *hotline.ie*. While ISPAI members have zero tolerance of child sexual abuse imagery and are as determined as ever to act swiftly against this content, this is a matter for the whole Internet industry, not just access providers. General data protection is becoming more stringent in light of the new general data protection regulation, GDPR, which will come into force in May. Comprehensive legislative amendments are required to ensure protection for civilian organisations running hotline operations.

I am conscious of the time. I thank committee members for listening and look forward to addressing their questions.

Chairman: I thank Ms Niculescu. I call Deputy Sherlock.

Deputy Sean Sherlock: I thank the witnesses for attending. They have yielded much information in their presentations and posed many questions, particularly relating to child protection and preventative elements relating to child sexual abuse imagery.

What more can parents do to protect children from becoming vulnerable to that macabre world of child sexual abuse? Most children live in protected, loving homes where there is an element of vigilance by parents, but many children globally do not have such privilege. What more can governments or state agencies do to intervene and to protect? Is the law currently robust enough? Is there glaring ignorance - a term which I do not use pejoratively - about the so-called dark web among policymakers like ourselves with regard to what the dark web actually is? Much of this activity allegedly takes place there. It is something that most parents and citizens have no concept of. Perhaps more education is needed. Might I get an answer to those questions first and then, with the Chairman's indulgence, ask one or two more?

Ms Ana Niculescu: On what parents can do, communication and education are important. That might sound like a cliché but education plays a crucial role in instigating behavioural change such as this. As a society, we should be able to talk about the risks. I do not know if the Irish curriculum currently covers sexual education. I am not talking about the mechanics of it but the emotional and psychological aspects. We sometimes tend to put the cart before the horse and struggle to make sure children have the digital skills to use technology while not ensuring they have the maturity and knowledge to know how to deal with their emotions and to understand the consequences of their actions online. Parents and possibly schools could have a role in providing better education to kids.

On what governments could do, many countries still do not have legislation to cover child sexual abuse. That is a barrier in our work as well. Irish legislation is very precise, which helps a lot with our work. The words are quite descriptive and the actions are described in legislation, so we think we are ahead of many other EU member states.

With regard to the dark web, we thought that more content would move onto the dark web. The reality is that the majority of content we see is on the open Internet. The problem is that it is

across platforms. The assessment process has become more convoluted. One starts on a forum and then finds a reference to a website on the public Internet. One has to go through a couple of steps and sometimes it might involve downloading the content from a cyberlocker. I have even seen QR codes used. By scanning the QR code, one receives a link and then in a forum one has a password that provides access to the content on that link. Just documenting that process-----

Deputy Sean Sherlock: If the ISPAI which Ms Niculescu represents is aware of it, while the State responds through legislation and trying to deploy resources, and if one looks at the innovation cycle and the ability to bypass protocols, is there a sense in which the ISPAI's members have a responsibility to police this activity? If Internet service providers, ISPs, or other providers are the conduit for this type of content, should they police it and ensure that content is not available or is blocked? I am being a bit controversial in saying that because I understand the role of the conduit. There is a sense where many parents or anybody else with a sense of decency who has an interest in this issue would ask the question of why the content is not blocked. Why do search providers such as Google or Yahoo! not just block them? I know it is a very simplistic question but perhaps it warrants an answer.

Ms Ana Niculescu: Blocking is not the solution. The solution is to remove the content at source.

Deputy Sean Sherlock: Would blocking remove it?

Ms Ana Niculescu: Removing it is a more definitive action. Blocking is just a way of masking that root and, with technology, one can always find a way around it.

Deputy Sean Sherlock: Why not remove it then?

Ms Ana Niculescu: We remove it when we identify it. We have taken a step forward and we work internationally with Interpol. Interpol has started to record every instance of child sexual abuse imagery. It uses a fingerprinting method so we now have the option to cross-reference known content with new content and new content is then added to the existing content. That is a step forward.

Deputy Sean Sherlock: So the ISPAI is effectively building a file?

Ms Ana Niculescu: It is not just that.

Deputy Sean Sherlock: For a criminal case?

Ms Ana Niculescu: *Hotline.ie* does not record the images. We only record the URL because we use an international report management system. We can contribute all the images we see and those images are inserted into Interpol's database. The primary purpose of this is to help with victim identification.

Deputy Sean Sherlock: I have two final questions. I thank the witness for her reply because it was extremely informative. I appreciate her response. In respect of the Professional Development Service for Teachers, PDST, and the Department of Education and Skills, what is the budget for Webwise? How much of the budget is allocated to this endeavour?

Ms Jane McGarrigle: For the current project, which runs up until June 2019, the budget is just over €740,000.

Deputy Sean Sherlock: Is that $\[\in \]$ 740,000 per annum or for the project?

Ms Jane McGarrigle: It is the total funding for the project.

Deputy Sean Sherlock: Over how many years will the programme run?

Ms Jane McGarrigle: It runs from 2016 to June 2019.

Deputy Sean Sherlock: On the PDST, how many teachers have taken up continuing professional development in respect of Webwise and Internet safety awareness?

Mr. Simon Grehan: There are a range of supports. Summer course provision is probably the most popular. Last summer, 3,330 teachers took online courses, which include significant amounts of content on Internet safety. Approximately 2,800 took face-to-face courses.

Deputy Sean Sherlock: Is this content included in the mainstream social, personal, health and education, SPHE, curriculum? Is it a de facto part of it? Is it compulsory for students or is it undertaken by choice? Can school principals or teachers say that they have an interest in this area, that they want to take it on board and that they will go for the CPD and teach their pupils about the content? Are the witnesses saying it is not compulsory and that it is not part of the mainstream curriculum?

Mr. Tony Weir: I thank Deputy Sherlock for the question. To make matters clear around SPHE, as a subject it is compulsory.

Deputy Sean Sherlock: I appreciate that.

Mr. Tony Weir: It is also compulsory within the newly designed guidelines on well-being, which have recently come into play and which are now in effect. Well-being is seen from two perspectives: a whole-school perspective, which is something the entire school is expected to be aware of and develop a strategy towards; and from the curricular perspective. The curricular provision for well-being currently includes physical education, civic, social and political education, CSPE, and SPHE. Within SPHE, there are four specific strands, all of which have particular components relevant to student safety. The first strand is "Who am I?", which focuses on developing self-awareness and building self-esteem. The second, which is probably the most relevant, is "Minding myself and others". This strand provides opportunities for students to reflect on how they can best take care of themselves and others. This would include significant work around the online space - Internet safety and so on.

Deputy Sean Sherlock: It is not a de facto part of the SPHE curriculum, however. If one talks about, for example, student safety, it is very much down to whether a teacher decides to inculcate this programme within his or her SPHE pedagogy or content. If a school or an individual teacher does not want to subsume this into its curriculum, it does not necessarily have to do so. Should we think about making this a compulsory part of the curriculum? That is the key question. While that is a matter for Government and policymakers, I am sure there is a provision within the Department to have a discussion about bringing this into the mainstream and about every teacher teaching the SPHE curriculum having to include this.

Mr. Simon Grehan: We have an enabling curriculum which allows teachers to choose what textbooks, for example, they want to use to meet its objectives. In 2013, an update to the anti-bullying procedures and an anti-bullying action plan was published by the Department of Education and Skills. In that, for the first time, all schools were mandated to carry out anti-cyberbullying awareness and prevention work. It does not necessarily have to be done as part of a particular subject or a particular part of the curriculum, but it is in the guidelines that all

schools must carry this out. To my knowledge, that is the first instance of such an initiative in Europe. It is something that all schools have a responsibility to complete through their antibullying work.

Chairman: I apologise to the Deputy, but I will have to move on to the next questioner. I call Senator Freeman.

Senator Joan Freeman: I thank the witnesses for their presentation. It was very interesting. I need so much more time to absorb the report and to get my head around it. To follow on from something Deputy Sherlock said, the Department is depending on the goodwill of the teacher to implement these cyberbullying safety procedures. That is chronically wrong. My daughter is a teacher. Teachers are up to their eyes in work. Therefore something should be done in order that each school has one person to go to in respect of cyberbullying and safety concerns. That is just a general comment.

As I said, I need more time to look over everything. I know the witnesses have given this report over a period of time. One of the things I notice is that the Lanzarote and Budapest conventions have not been ratified. Why have we not ratified them? That is my first question.

The previous Chairman of this committee, who is now a Minister of State with responsibility for mental health, Deputy Jim Daly, put in a request that children under a certain age would not be allowed iPhones, especially in schools, or that there would be some sort of legal impediment to children having the use of iPhones. I am not sure how far he went with that request. As Ms Niculescu said, children do not have the sensitivity or emotional intelligence to prevent themselves from doing what every other child is doing. I must talk to Deputy Jim Daly about it. Would it have been good to progress the idea of banning iPhones up to a certain age, in particular in schools?

In my previous work I went around schools. I know how ignorant of cyberbullying issues parents can be. We just do not know. Even young parents have no idea of the enormous volume of danger there is for our children. They are always shocked and surprised. I am always asked how parents can stop their children being on the Internet. The first people who should be educated are the parents. They should be educated when their children are in primary school and before they have access to any phone. Once the parents know the dangers, and I mean the full range of dangers, they will be able to monitor their children. Children do not have the capability or capacity to monitor themselves before a certain age. By depending on them and on the goodwill of a teacher, perhaps, to take on these things, we leave our children open to a massive amount of abuse.

Mr. Tony Weir: I thank the Senator. To respond briefly to the issue she raised about iPhone use in schools and whether schools should ban them, I presume by iPhones the Senator meant smartphones in general because the iPhone is a particular brand.

Senator Joan Freeman: Yes, smartphones in general.

Mr. Tony Weir: We in the Department of Education and Skills do not have specific policies which tell schools that something or other must be banned. These decisions are delegated to school level to allow schools make the decisions which they think are most appropriate in their particular educational context. The area in which I specifically work is post-primary schools. I attended an international conference approximately two months ago which Ministry experts from around Europe attended. The idea known as the bring your own device, BYOD, space

is gathering a lot of traction in terms of integrating ICT into teaching and learning throughout Europe. That particular space has a lot of advantages but it also has a lot of risks, as the Senator has pointed out. It is very much a question of schools deciding on the appropriate use for any of these technologies. I was quite taken by what Ms Niculescu said earlier, that technologies themselves are not inherently good or bad. It is the use to which they are put that is the question. Within any particular school context, schools can decide to allow smartphones to be used. There is a very interesting video clip of about four minutes' duration on the Professional Development Service for Teachers, PDST, website showing how smartphones can be used in a class in a very educational way in a physical education class. I recommend it strongly to any of the committee members if they have the time to watch it. It is a badminton lesson in Deele College in Raphoe in County Donegal. The teacher uses the smartphone to gather students' opinions about the class, to garner feedback and to set up a link whereby students can see a particular skill being demonstrated on tablet devices. They certainly have a particularly useful educational function. The Senator is correct, though, that access cannot be unfettered and completely uncontrolled, especially for younger children in schools. Those decisions are very much up to individual schools.

Senator Joan Freeman: Is that not again being very ambivalent, allowing schools to make their own individual decisions and allowing teachers to make their own decisions about whether they should take on the courses? It is leaving everything open to the school policy instead of having an absolute policy as to how we protect our children.

Mr. Tony Weir: I apologise if the Senator thinks it is ambivalent. In the Department of Education and Skills, we do not go down the road of telling schools what they must or must not do in this particular area.

Senator Joan Freeman: Why not? Why can the Department not do that?

Mr. Tony Weir: It is very hard to establish a blanket position. Within the confines of schools, there is a very advanced content filtering system for the use of the Internet. There is a firewall system which is managed by the PDST-Technology in Education, PDSTTIE, which blocks, blacklists and stops access to particular sites that are inappropriate. I think Deputy Sherlock mentioned the Google search engine earlier on. Within a school context, even that is a particularly controlled form of the search engine. It is not the same as what we would have at home. Rather than going down the road of bans, the related point which Senator Freeman made around education for parents and students is the key one. It is not the technologies themselves that need to be banned in a blanket way. It is about educating people on their appropriate use.

Senator Joan Freeman: We are a signatory to the convention but we have not ratified it. Does anybody know why?

Mr. Tony Weir: That is not my area, I am afraid.

Senator Joan Freeman: Does anybody know? Is there any Deputy or anybody here in government who is following cyberbullying and cybersafety?

Chairman: To my knowledge, it would be a matter for the Minister for Justice and Equality.

Senator Joan Freeman: Maybe they need somebody, a Deputy or somebody, to follow up to make sure that these are being-----

Chairman: We can make inquiries and come back with that answer at our next meeting.

Senator Joan Freeman: Thank you.

Deputy Tom Neville: Following on from Senator Freeman's comments on technology, in the private sector, for any technology that is used, there is always a global or centralised agreement on the way technology is disseminated. I agree with Senator Freeman that it is putting a lot of pressure on teachers and parents to have autonomy on this and to be told to decide what technology to use. It is no disrespect to them to say they are not educated enough to be able to decide what is the best technology to use within a specific school. They are coming from a generation that did not grow up with it, although I know the younger ones are from such a generation. They go out to the market and there is a plethora of platforms and applications to choose from and they do not know which is the right one. They hear all this conflicting evidence that goes around the place. The schools need centralised guidance on a particular platform or tool or what is the best practice. That guidance would make life a lot easier for teachers, who do have a lot of pressure on them in this regard.

In the private sector, any of the major businesses that use any enterprise resource planning, ERP, system do so in a way that is quite centralised and disseminated globally. It is just a question of copying that model. It is much easier for the workers and the IT systems to integrate and for the information to be disseminated. It can be done quite easily as well.

I would take a more liberal view on technology and children. Like in hurling, we have to get right in within technology and actually have children interact with it. We should allow them to learn positive patterns, behaviours and feedback in their communication and interaction with technology. That is from my own research from speaking to people about it. I understand that we could take the more conservative view of banning technologies up to a certain age. Sometimes when we ban something, it becomes more attractive. It is like prohibition. That is no disrespect to what was put forward. At what age do we stop - six, seven, 13 or whatever? A child might pick up a tablet at home - he or she might know the password and might not tell the parents. Given that the child is not educated and has not interacted with it, he or she is just swiping. It is important that they understand technology and how it works and that they are educated on the pitfalls to a certain degree. Obviously we do not want to take away a child's innocence either; we do not want to take away their childhood from them. What are the thoughts in the Department about that? Have there been discussions around it? Mr. Weir said that Webwise will continue until 2019. What is the focus for the next 18 months? Does Mr. Weir have any proposals for the time from 2019 on? Are there applications for more funding or what discussion is to take place afterwards?

I think my contribution is more around the softer behaviours of children in respect of technology - ordinary everyday stuff. The softer side of cyberbullying, for want of a better word, as opposed to sexual abuse or anything like that, which is the harder side of things where real crime is committed. We can have people on their phones aged ten, 11, 12 or even younger, who might be picked on or bullied at school or whatever through a group. I am trying to focus on the softer side. What are the thoughts around that?

Mr. Tony Weir: I thank the Deputy. My colleague, Mr. Grehan, will deal with the future work of the Webwise project. On the guidance for schools around what platform and software to use, etc., the Department of Education and Skills does not get into the space of telling schools to use a particular piece of software or architecture. There would be procurement and competition issues arising were we to advocate an Apple product over a Microsoft product, for example, or a Microsoft product over a Google one. Those decisions are devolved to school authorities.

The Deputy raised an interesting point about schools deciding what technology to buy and use in terms of how they can then integrate it into their teaching. We would view that as putting the cart before the horse slightly at the moment. As part of the digital strategy for schools, which is in place at the moment, funding of €210 million has been allocated to schools by the Department of Education and Skills over the five-year period. Crucially, schools are encouraged to think about their aims in respect of teaching and learning and then to decide what particular piece of ICT architecture, equipment, software, etc., will help them to meet those aims. The other approach is to buy the piece of equipment and then ask what use we can make out of it. That is not what we are doing. We encourage schools to think about what their priorities are with regard to teaching and learning, in line with our school self-evaluation work, and then to decide what particular technology can be used to enable them. With this in mind, we recently produced the digital learning framework for schools, which features both a primary and postprimary version. This points to the question the Deputy asked about some schools being unsure whether what they are doing is correct or appropriate. The framework has two dimensions, leadership and management and teaching and learning, both of which have subdivisions around particular domains. They also provide standards and feature 64 statements of effective and highly effective practice. Schools can consider how they can aim to reach these standards. If a school decided it needed to do significant work on teachers' collaborative practice, the digital learning framework features statements outlining how it can use technology to achieve greater collaboration among its teachers. There is a statement for effective practice and another for highly effective practice and these serve as a roadmap for schools in aiming towards these standards. The digital learning framework also has significant input on online safety for students and educating them about how to use the Internet wisely.

Deputy Tom Neville: What I am picking up from the witness is the classic business analyst model under which one gathers the requirements and then produces a technical solution to match them. Is support available to teachers in terms of someone joining the dots?

Mr. Tony Weir: Yes. The technology integration section of the professional development service for teachers has extensive information, guidance and advice for schools on different types of Wi-Fi networks, architecture and devices that are available.

Deputy Tom Neville: I understand that but what I am asking is whether there is a conduit available, a person similar to a business analysis in the private sector, who matches the requirements with the technical specification. To return to my earlier argument, one has a product, architecture and so forth. Teachers will understand the functional analysis with regard to education but not the technology. They may be told about it but they will not understand how it interacts. Is someone available to link the technical solution to the educational requirement? It would place a significant burden on the teacher to have to interact with the technical solution when he or she is putting it together.

Mr. Tony Weir: I think I understand the question. Schools do not like the idea of the Department telling them that if they want to develop a particular aspect of its teaching and learning, they should or must use particular software or hardware. They prefer to have flexibility on such matters because they may have local arrangements in place or a member of staff who is an expert in a particular area and they may believe they can use that.

Deputy Tom Neville: I understand that but is someone available to help them put the solution together?

Mr. Tony Weir: As I stated, PDST does this.

Deputy Tom Neville: Mr. Weir indicated the PDST provides advice and documents. Does someone visit the school and sit down with teachers?

Mr. Tony Weir: Yes, bespoke visits are organised by PDST every year. On request, the service would visit a school and deliver a seminar or in-service day on any particular aspect relating to technology that the school wished to have addressed. I am not sure exactly how many of these are taking place but there are certainly numbers of them.

Deputy Tom Neville: I assume the service allows teachers to discuss the specific solution for the specific issue at the time, as opposed to taking a blanket approach.

Mr. Tony Weir: Yes, that is correct.

Ms Jane McGarrigle: I will take Deputy Neville through some of the details of PDST's current work plan. A major aspect of our activity is to create educational supports. Mr. Grehan outlined the resources we provide. We have in planning three curriculum resources, two of which are post-primary resources. We are working on one of these resources, which will be a junior cycle SPHE resource addressing the topic of online sexual exploitation and coercion. We are working on this in partnership with An Garda Síochána and it will comprise three lessons. The aim of the resource is to provide more awareness of the dangers of online sexual exploitation and coercion and offer support and advice for young people to enable them to recognise if they are being manipulated online and how they can protect themselves online. It is a follow-on from our Lockers resource on the non-consensual sharing of intimate images.

The second post-primary resource we will work on will be on digital citizenship, which will cover responsible and ethical use of the Internet. We hope it will tie in with students doing a research project, for example, and will cover topical issues such as big data, how the Internet works and advertising. For primary level, we will do an introduction to the Internet, which will be aimed at third and fourth classes.

We also do considerable work with our colleagues in the professional development services for teachers. We are finalising a face-to-face support which, as Mr. Grehan stated, involves visits to schools to offer supports. We are finalising an introduction to Internet safety in the classroom, which support teachers will be able to avail of. This resource will provide advice and support to teachers who wish to use social media, for example, and showcase some of the resources we have available for teachers. Disseminating these resources and ensuring PDST and its resources are available to teachers will be a major part of our work. We will promote our resources and disseminate them to schools and various other organisations, for example, An Garda Síochána. We will continue to work on this.

To support the development of our resources, we will also engage in an online campaign in 2018 in respect of our sexual exploitation and coercion resource. This will be rolled out next year. We had a major success with the Forever video, which is identified in the opening statement. When we launched the video in 2016, it received more than 1.2 million views among parents, teachers and young people. This type of online awareness raising and targeting of teens directly on Facebook and Twitter is a very important part of our work. In addition to the campaign planned for 2018, we will do another campaign in 2019. We work closely with our colleagues in the Safe network to understand emerging trends. We have not yet nailed down a topic for the 2019 campaign but it will be selected closer to the time. By June 2018, we will probably have a better idea of the best topic to cover in the awareness campaign for 2019.

Public and media relations are another important part of our work. Mr. Grehan outlined our work on Safer Internet Day, which Webwise is responsible for promoting and co-ordinating. We will run an event on Safer Internet Day which takes place on the second day of the second month every year. This will include engaging in public and media relations around it, including for 2019.

Our website, *Webwise.ie*, is one of the main aspects of our work. The website is the hub or our activity and the point parents can access immediately if they are worried about an app they have encountered. They can find videos, information and advice and we also offer advice for teachers. All our resources can be accessed on the site and ordered for free. They are disseminated to schools nationwide. We have plans in place to develop various content for parents, teachers and young people through our *watchyourspace.ie* website which offers information and support for young people. We are supported by the work of our youth panel which helps us to develop different topics. That covers some of the areas of the work plan until 2019.

Mr. Grehan will comment on the open submissions for the next phases of the project and how it works.

Mr. Simon Grehan: In terms of funding, we are 50% funded by the European Commission through the Connecting Europe facility and 50% funded by the Department of Education and Skills through the teacher education section. It comes in at roughly something like €150,000 from each per annum. It has been in place through various different EU projects since about 2004. The current funding tranche is for 30 months up until June 2019. There is no indication that there will not be any continuance of European funding after that but it remains to be seen and it is in the stated objectives of the current funding model that member states move towards sustainability and look for sustainable models of funding. This encompasses a range of possibilities. In the past, we have seen a reduction in European funding pushing back more towards member states to fund these initiatives.

Deputy Tom Neville: I understand what Mr. Weir is saying about the procurement process. He stated that schools do not like to be told what to do. Is there a study in this area? The flip side of that argument is that if technology is rolled out across platforms and it is homogenous, the data that can be gathered about behaviour, interactions, etc., would be quite lucrative and useful in determining how we move forward for all schools. Has there been any debate around that within that Department or it is just at an inception phase?

Mr. Tony Weir: I am not quoting from any survey or study. I am speaking anecdotally from my work as an inspector visiting schools carrying out inspections and whole-school evaluations. My experience has been that schools tend to have their own particular expertise in particular areas and prefer to use that whether it is vested in a particular teacher or items of software or hardware with which they are comfortable, which they know how to use and which they feel work best for them. They prefer to be allowed to use that rather than told: "You can't use that now. We're telling you to use this one." Schools like their autonomy in that area. That is not to suggest that we do not provide them with guidance where appropriate. I have already outlined that the PDST is the body that does that and it provides that kind of service to schools where they need it. What was the second part of the Deputy's question?

Deputy Tom Neville: It related to the integration of data.

Mr. Tony Weir: We published an ICT in schools report some years back but we do not carry out specific ICT subject inspections. We do not have particular data on that because we do not

carry out subject inspections around ICT. The cross-platform issue would very much depend on the type of software that is available. There is some cross-platform software and there are other forms of software that are bespoke to Apple iOS, Android and Microsoft and it can be difficult to gather data. I am not quite sure about the data the Deputy is referring to.

Deputy Tom Neville: I am wearing two hats. I wear a mental health hat and a children's hat because I sit on that committee. What we are saying all the time is to use analytics to try spot patterns of behaviour. This is still very much in the debate phase. It is more of a philosophical question or issue. If we look at any industry, analytics are being used to try to determine behaviour, patterns and outcomes to identify trends through research. I am throwing it out there as a matter for debate.

Mr. Tony Weir: Mr. Grehan might talk about the EU Kids Online survey, which was an extensive survey carried out in 2014 around the sort of area we are dealing with today. There was pretty useful data on that on which Irish students came out quite well in many areas. Does Mr. Grehan wish to outline that?

Mr. Simon Grehan: The Deputy is right. We do rely on data to inform everything we do and all the awareness-raising objectives are based on what we know about children's behaviour. There is a lot of unreliable information in this field and we rely on two sources - work done by Dr. Brian O'Neill, who I believe is coming before the committee in the future, and his colleague, Thuy Dinh, from Dublin Institute of Technology and their EU Kids Online and Net Children Go Mobile research initiatives. These are basically best-in-breed research about determining what children are doing. Analysing analytics in school will only give part of the picture of children's use of the Internet. Most of it is at home or out and about as mobile use is quite extensive. The way they determine or get their information is really by interviews with children in their homes. It is done by market research experts who use random-walk methodology in a stratified representative survey of 1,000 children across the country. In the case of EU Kids Online, the same methodology was used in 27 countries around the world so it gives us a benchmark picture of where we are in respect of certain risk behaviours. I guess I am speaking more about what Dr. O'Neill will talk about with the committee in the future but it is what we rely on for our information about what is the risky behaviour we should be targeting with our awareness campaigns.

Deputy Denise Mitchell: I will be brief as a lot of issues have been covered. Education of parents is a major factor. In respect of a parent who is not very good on the Internet, I am bit concerned that everything that seems to be done involves Internet safety workshops online. Much of this stuff is all online and there are parents who still get a shock when they see a computer and are afraid to use it. What publications do the relevant bodies roll out within the schools? Will there be publications relating to the online campaign for 2017 that parents can access?

I have a few questions about *Hotline.ie*. Does Ms Niculescu feel it has the effective amount of resources to carry out its remit? I acknowledge that she has said that it works with An Garda Síochána. Are there any changes to resources or approach that could benefit its work? Could she touch briefly on the levels of international co-operation because I sometimes find that it is difficult to pursue people behind such material? Could she give us a breakdown of that?

Ms Ana Niculescu: In terms of resources, I spoke earlier about the international report management system we use and how each image can contribute to the Interpol child sexual abuse database. That requires a lot of work. Previously and under current procedures, one

image on one website is enough to render the entire website illegal. If we go into image assessment, and, obviously, the merits of that are great for law enforcement, that will imply more work and the need for more content analysts to perform that work. To give a rough example, one website was reported that broke into thousands of images. It took one content analyst almost two days to assess every single image and then be able to close that case and forward it to the appropriate jurisdiction.

In terms of international co-operation, *Hotline.ie* works within this jurisdiction so we take action against child sexual abuse imagery hosted in Ireland. However, given the nature of the Internet, one can never really know where the content is hosted until one confirms that it is child sexual abuse imagery. At that stage, one tries to identify the source country. If it is outside Irish jurisdiction and if the country has a hotline, then all the work that we have done nationally and all the technical information is forwarded through secure channels to that hotline. That hotline can then assess the content based on the relevant national legislation and ensure that similar appropriate measures are taken.

I am happy to report that in over 18 years of operations less than 0.5% of the content was found to be hosted in Ireland. However, with Ireland becoming a digital hub for many international companies we have started to notice a slight increase in recent years. That is why I strongly believe that a co-ordinated national approach and working with the whole Internet industry, not only the access providers, is important. Most of the child sexual abuse imagery that we have identified has been hosted on non-Internet-service-provider member services. To be able to take action against such services, we had to go through law enforcement channels because there was no point of contact and we received no answer. As a result, it took longer than it should have.

Mr. Simon Grehan: Deputy Mitchell put forward questions relating to parents, especially parents who are not comfortable getting their information online. We have had a collaboration with the National Parents Council Primary going back to 2004. It has a regional network of trainers who deliver seminars in schools through the parents' associations in schools. One of the most popular talks is around Internet safety and the child and the Internet. We work with the council around content for these. The council delivers the talks but we collaborate on the content.

Earlier this year, we worked with the National Parents Council Primary around producing an online hub. It has video content from experts, including child psychologists like John Sharry. It is all in video format so it is easily embedded into social media and shared through Twitter, Facebook and various other sources. All the key content that we gathered for the digital hub is available in a regular publication that we send out on request free of charge. Primarily, we are sending it out to schools to give to parents through the schools. School is not only the best way of reaching the majority of children regardless of income or background but it is also a good way of reaching parents. There are particular objectives in the digital strategy for schools around strengthening the home-school link relating to use of technology by children. Certainly, it is a key focus for us to support schools to strengthen those links and to get consistent messaging and a consistent approach between primary schools and the parents of children. Where there tends to be a strong connection between parents and the school, for example, where parents bring children to the door of the class, it is effective. That is how we are working with the National Parents Council Primary. Traditionally, the parents who attend these events tend to be engaged in all aspects of their children's lives. It is harder to reach more vulnerable children. That is why school is a good place to reach those children directly.

Chairman: Thank you for that. Many parents are engaged but there are others who are engaged but who may not be aware of the avenues of obtaining the information. I was pleased to hear that you are communicating with schools and sending out information to them. That is critical. I am a father of two children so I am at two school gates at the moment almost every morning. It occurs to me that there are parents who would be fully engaged in terms of access to information and most likely they would know about the various websites and sources of information or the school has made the information clear to them. Then again, there are parents and schools who are not so well informed. A related point occurs to me from what you have been saying and from some of the questions earlier in the morning – Deputies Mitchell, Neville and Sherlock touched on this as well. They made the point about how dissemination of information informed an education of the parents themselves and how this is of critical importance. Does the hotline provide schools with information? Do schools disseminate that information to parents? I do not recall receiving anything on web security or social media security and my eldest is in senior infants. Perhaps it is a matter for some years to come, although I assure you they are online. Is dissemination of information being done within the schools or at your level, Mr. Grehan?

Mr. Simon Grehan: All the resources are available free of charge to schools in hard copy format. They are being sent out. We are one of many providers in this area offering advice. There is no specific requirement for schools to do it. Some are more active and others work in different ways. It has become an increasing focus, through the digital strategy for schools, to strengthen the links between home and school in respect of children's use of technology. We are seeing cross-over in terms of use of technology in schools and greater teaching in schools through the social, personal and health education curriculum in the use of technology by children outside schools. I am unsure whether that specifically addresses your question, but there is no mandatory provision.

Mr. Tony Weir: In the action plan for the digital strategy - I have a copy of the document before me - action 17.3 is a specific action around that area. It refers to continuing to provide parents, guardians, students and teachers with information, advice and tools to promote safer, more responsible and more effective use of the Internet. It is a clear action item in the digital strategy and it is an ongoing item - it is not only for a particular point in time.

Chairman: One of the biggest issues in terms of what the child is hearing on Internet safety in the classroom is participation on the part of the teachers. I have not seen this. I have looked at some of the information provided on research. Some of the figures are interesting. Some 45% of parents say the risk of children using the Internet outweighs the benefit. There are other figures as well which I am concerned about but not surprised by. Senator Freeman referenced the level of work those in the teaching profession already have to do. I know about this - I have teachers in my family as well. However, I believe there are certain bars that must be reached in a child's education at a particular level. Clearly, the educators determine what level that would be, whether first class or second class, when it comes to running a module. Can you provide some information on that? Is that done? Is the SPHE model used in terms of the type of learning that is provided and the resources available? You mentioned online tutorials and the associated engagement. That is all good, but is it a requirement for the teaching profession to know about avoidance of cyberbullying? Are they obliged to provide advice to young formative minds as to how to avoid getting themselves into such situations?

Mr. Simon Grehan: We can benchmark what we know about teachers' mediation of the Internet in Ireland against others European countries. We are actually significantly ahead of what

is done elsewhere in Europe by 15% to 20%. It is quite a big difference. I refer to children who were interviewed and said that their teachers have provided information to them on how to use the Internet safer and a range of other supports. I guess it is because our strategy of providing curriculum resources to teachers to deal with this topic through SPHE is not universal across Europe. Others use different awareness raising methods. That is our approach. Eighty-one per cent of teachers have suggested ways to children between the ages of nine and 16 on how to use the Internet more safely; 77% said their teachers had explained to them why some websites are good or bad; and 73% have talked to the children about what they can do and what they cannot do on the Internet. Between 2011 and 2014, we have seen a move away from what is called restrictive mediation - that is rules around what children are allowed and not allowed to do - towards interventions promoting better relationships and safer interaction between children and their peers on the Internet.

I guess this is our approach and this is what we are promoting. As for whether it is the most effective, there are many different ways to achieve the same aim. It is a cost-effective method of doing it. Teachers provide support more than in other countries across Europe. Whether that reaches the benchmark of the level of support one would like teachers to provide is a different question.

Mr. Tony Weir: I will make one additional comment on that, if I may. We are focusing today on the interventions of the Webwise team in the continuing professional development space but the undergraduate teaching programmes would also contain a significant element of this type of awareness currently in teacher preparation.

Chairman: Given the age profile of those in the profession, it is clear that over the past few years they have received direct training. I suppose there are some who have been in the profession longer who may not have been subject to that. I take and accept entirely Mr. Weir's point.

I have a question for Ms Niculescu. On participation and involvement, I suppose it is critical that the likes of Facebook, Twitter and other social media platforms play a role in ensuring that children are not subjected to certain imagery. A concern I would have is one only ever hears negatives about Facebook's policy, for instance, on nudity. We have heard some amusing anecdotes about individuals posting photographs that have been banned when, in fact, they should not have been because there was nothing to it and then there is the opposite side of it when one has a small child sitting with an iPad, phone or tablet in his or her hand who is inadvertently coming across items that really the child should not. ISPs obviously have a role to play, not in terms of what Ms Niculescu and Deputy Neville pointed out that it is not necessarily about banning the sources of those images when they are legal but in trying to ensure that the social media platforms are being responsible in the types of information that they allow up on their websites. I was quite taken aback recently when reading about bots - I refer to Twitter bots. If one randomly tweets something and one uses particular words, all of a sudden I have noticed I start getting followed by peculiar bots, the majority of which are sexual services related. It is not that I am posting strange things. I am a public representative. It is all there - one can read it. One gets a lot of that and I find it very strange.

There is also a considerable amount of advertisements from betting companies. I am not a betting man. If one is dealing with a child a betting company is not that important but they are obviously using algorithms that are targeting people. It would not be beyond the realms of possibility or opportunity for some of those advertisers to target young people. I suppose my question for Ms Niculescu, given her expertise in the area, is this: How important are social media platforms in terms of the avoidance of online sexting, children participating in things that

they should not do and exposure to grooming and-or other experiences, and what role do policymakers have in ensuring that such behaviour is eradicated, particularly in the likes of Twitter? Somebody would have to show me figures on the exposure of children under the age of 16 to Twitter - I would say it is probably not as high as it is above that age - but other platforms, such as Facebook, have an important role to play in this.

Ms Ana Niculescu: It is a challenging question.

Chairman: I am sorry. Perhaps I should have simplified it.

Ms Ana Niculescu: It is true it would be doable. They can use algorithms to try to identify or filter out some of the content, but that is very difficult, particularly as, in identifying a user as a child as opposed to an adult, in my line of work we notice that a lot of content is not hosted or provided on social networks. It could work based on the evidence that we see. Sometimes social networks are used as a starting point in the grooming process. However, when things start to escalate the conversation is moved to a more obscure platform.

In terms of the legal content, I accept and understand that some of it may not be age appropriate but it is a matter of how accurately can one identify the age of the user and what measures can one put in place to ensure that children are not disclosing the wrong age, for example, a child of eight years stating that he or she is 14. In that regard, we go back to educating and trying to promote positive content being disseminated on the social network platforms.

Chairman: I am conscious of time. A last question for Senator Freeman.

Senator Joan Freeman: Briefly, I am sorry. The word "ambivalence" keeps coming back to me. The biggest component in of all this are parents. They are the ones who can protect. Children are at school for six hours a day. There is another 18 hours in the day. Ms McGarrigle mentioned there is a programme going in for third class, but does she think the children in first class have not been using iPhones and everything else way before that? I am interested in that word "ambivalence". They might have the information. They might have the book, and it is available for the schools, but do they distribute those to each parent? Whether they like it or not, each parent should be getting those booklets?

The other point is to question themselves. Have they had any research done on the work that they are doing and on the access of the parents to the service? How many are doing that? How many of the children are doing that? What is happening to all the parents who do not access the Webwise and *Hotline.ie* services? This is really to see about the efficacy of the work the service is doing. Is there research and statistics on that?

Ms Jane McGarrigle: I can help answer that question. We have distributed more than 13,000 hard copies of the parents' guide, not only to schools but to parents through the National Parents Council - Primary. As I mentioned previously, our website is a hub for all our activity. We address topics, such as using iPads.

Senator Joan Freeman: Does Ms McGarrigle have statistics on how many parents are accessing it?

Ms Jane McGarrigle: Unfortunately, we cannot do that and analytics do not allow us to distinguish between a parent and a teacher. We have email databases on which we have audiences broken down into parents, teachers, principals, young people and so on. Unfortunately, Google Analytics does not allow us to get into that aspect.

There was a question about content for younger Internet users. We have advice and information articles on our website. We engage in a lot of digital marketing and online promotion to ensure other parents know who we are. Most of our audience find us through a simple search. For example, many parents just want to know how they can switch something off or about a new feature in an application. In that way parents find us online as we help to answer such queries. There is a range of ways in which we try to target parents.

Senator Joan Freeman: Has it been measured? Do the delegates know how many parents are accessing the site and its impact?

Ms Jane McGarrigle: I am afraid that we just do not have that information.

Senator Joan Freeman: The group should conduct its own research to see what the effects are.

Ms Jane McGarrigle: We have carried out research into parents' concerns, etc., and released that information in February this year. To date, we have not carried out a review of the current resource which was launched in February this year.

Chairman: I thank Ms McGarrigle for her answers.

Senator Máire Devine: I will be brief. I am sorry I missed the engagement, but I was attending a meeting with representatives of the Health Service Executive to try to sort out children's issues. Kids have journals which parents sign to confirm they have done their homework. Could a brief guide for parents be included in each book? Could schools do this when they are being printed? The parents could sign it also to indicate that they had read the brief guide on children's safety. The cost of a journal is approximately €10 and every kid has one which means that it gets to every household. I am not sure if children have journals at primary level, but they have certainly started to use them by the age of 12 years. The parents, as well as the children, could sign them to indicate that they had read the guide. One or two pages would do it and they would be easily accessible. Could schools be approached and asked to consider introducing such a practical measure?

Chairman: It is a good idea. I thank the delegates. We are finishing on a positive note, which is always good. The committee appreciates the delegates giving of their time to present and answer the questions of members.

The joint committee adjourned at 12.15 p.m. until 9.30 a.m. on Wednesday, 18 October 2017.