

Investigating attitudes towards online safety and security, and evaluating a peer-led Internet safety programme for 14- to 16-year-olds

Final Report

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Executive Summary

This report details the findings from a project to explore peer education in the context of the technologically complex lives of children and young people. The project focused on encouraging school children aged between 14 and 16 in engaging with some form of peer-education or peer-support activity.

Children and young people can demonstrate a breadth of knowledge on the subject, whether gleaned through formal or informal learning methods. However, their actions can demonstrate a gulf between their articulation of risk-avoiding behaviours and their actual carrying them out.

Teachers play a very important role – being key influences on whether a strand of activity is conducted or not, the focus of the activity and the ease of which young people can be involved. Teachers have many pressures and constraints on them, and this research demonstrates the need for engagement so that e-safety is more than just a "tick-box" exercise for passing the Ofsted inspection process.

A range of peer-education approaches were observed throughout the project, each tailored to the culture and context of the school. This demonstrated the levels of comfort or concern that teachers had over the potential for young people to be over-burdened or to encounter issues that they could not handle. In the school that had specific training for peer-mentors, this did not appear to create any difficulty.

Discussions held with the students outlined their concerns regarding the likelihood of risks to themselves. Internet Attacks were considered more likely risks than issues with Cyberbullying, social networking problems or Identity frauds. Levels of understanding of the types of threats available varied between the schools, with one school for example demonstrating greater understanding of the risks from viruses and other Internet Attacks and a separate school demonstrating a higher understanding of the potential risks around social networking. The Ambassadors day was able to draw on these different strengths and facilitated the sharing of this knowledge between the Ambassadors.

The impact of the research has been able to build upon the enthusiasm of young people in the way they make use of the technologies that surround them. Many of them know how to keep themselves safe online and the guidance from key teachers, combined with the supportive Ambassador's community, has prompted a change not only in their own online behaviour but also in that of their classmates.

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1. Introduction

This report provides details about the research project conducted between April 2008 and March 2009 by the University of Plymouth and supported by Becta Harnessing Technology Phase 2 strategy. It refers to some details originally published in the Interim report for the project, issued on November 1st 2008, and expands the key concepts in more depth by linking where appropriate to recent literature. The definition for the term e-safety is used as described in the Becta publication for safeguarding children online [Becta, 2007].

The aim of the research was to answer the following questions:

- 1. What are young people's attitudes towards online safety and security and how effective are current awareness activities?
- 2. Are peer Ambassadors effective agents for changing attitudes and online behaviours?

The risks and concerns that modern technology brings are already well documented and so it is not in the scope of this report to dwell on or repeat these. However, where necessary these risks and concerns are mentioned in the context of young people's perceptions as a means of clarifying and enlightening discussions. The scope of the report has a geographical element, in that the research was carried out in schools within the Plymouth and South Devon area of the UK and so complements the work already carried out by the South West Grid for Learning (SWGfL).

This report begins by describing the context in which children and young people find themselves before moving on to an examination of the peer-education and e-safety landscape. The section that follows provides details of how the project was designed and the methodology that informed those design decisions. The data collected from interactions with both pupils and teachers are presented and analysed before moving on to details about the E-Safety Ambassadors themselves. The report concludes with a discussion on the overall findings from the project and a consideration to further work.

2. Background

Children and young people inhabit a fast moving, ever complex space, with interconnected technologies forming an underlying communications backbone [Lennox, 2008; Kennedy, et al, 2008]. Figure 1 sets out a graphic illustration of the complex interaction of influencing factors on a child's life and is used later in the report to illustrate how this research is situated within that complex environment.

The child is illustrated at the centre within their home environment. Not only do they have their mobile devices, primarily phones, but they are surrounded by personal computers of many types, shapes and sizes. As the Ofcom report on media literacy [Lennox, 2008] illustrates, as young people grow into their teens they amass a large amount of their own technology. They may well have dedicated laptops and desktops along with digital TV and a selection of gaming consoles, all of which provide them with the means to go online.

Within the home some parents and guardians struggle to understand how their young people make use of their technologies [Staksrud, Livingstone and Haddon 2007; NCH and Tesco, 2006], illustrating a gulf of understanding between them and their children. Whilst these key adults are concerned about protecting their young people, they may feel they do not have the awareness or expertise to protect them adequately and in some cases their approaches can polarise perspectives in the household [Livingstone, 2003]. As Sharples et al [2008] outline, the ease with which young people embrace technology excludes adults and leads to the perception that they are involved in situations that are risk-laden and unsafe. The area of this concern is illustrated in the diagram by the cloud.

For those in education, the formal learning setting provides interactions through classroom environments that are filtered and monitored with the technological infrastructure provided by members of the National Education Network. Senior management teams within schools are encouraged to ensure the delivery of the e-safety message through the curriculum and to develop their own acceptable use policies [Becta, 2009]. Teachers find themselves responsible for the delivery of the e-safety message throughout the school whilst being observed and assessed by Ofsted to ensure compliance. There are tensions between the desires of the teachers to make use of the virtual world in order to provide rich and interesting environments for learning, alongside balancing the concerns of anxious parents and senior management which often lead to a locked down environment that occurs as a manifestation of maintaining access yet providing safety [Sharples et al, 2008]. Schools play a lead role in the development of skills to stay safe online:

"In schools, children's e-safety behaviours appeared to be heavily influenced by the school a child attends..." [Becta, 2008a]

During the course of this research project, policies and practices were evolving to place more emphasis on online safeguarding. The recommendations from the Byron Review were being put into place with the forming of the UK Council for Child Internet Safety [DFCSF, 2008]. Local safeguarding children boards (LSCBs) were developing their own e-safety initiatives encouraged by Becta to provide a coordinated response the risks online [Becta, 2007]. The area represented by the dotted square in the diagram in Figure 1 is the area in which this research is situated. One key theme appearing through the e-safety literature is that engagement with peer groups is a key way forward [Sharples et al, 2008; Byron, 2007]. Indeed the Cyberspace Research unit originally created the FKBKO – For Kids By Kids Online¹. CEOP has its International Youth Advisory Panel, and the SWGfL have a youth panel. These initiatives have key influences on policies and higher level resources rather than by having a direct influence on a child's behaviour, and so are outside of the dotted line in the diagram. This research sets out to address at the grass roots level the unsafe online behaviours of young people by exploring ways of influencing their thinking and thus their behaviour. An assumption is made here that peers will provide a key influence on the behaviour of young people, and so making use of peer groups within the school context was the method to be explored. Acknowledgement must be made here that the leisure and play environment, in addition to clubs and organisations, also have a key influence on the behaviour of children and young people. We acknowledge that peer influences also come from these sources, but this was outside of the scope for this research.

¹ http://www.fkbko.co.uk/root/



Figure 1: Rich picture illustrating area of research

3. Peer education and e-safety landscape

The section above provides an outline context in general terms which is developed here to examine how the peer education might fit into the e-safety agenda.

There is a considerable amount of encouragement at a high level to involve young people in educating themselves for e-safety. As mentioned above there is already youth involvement with CEOP and the South West Grid for Learning, each having youth panels to represent the youth voice. Calls for peer involvement are found in Byron and Becta:

- Byron [2007] in section 2.36 proposes tapping into the peer communication that is a central part of young people's behaviour.
- Becta [2006] in their early recommendations for e-safety education and training propose that young people are involved in the creation of resources.
- Becta [2009] in their AUP document propose:

"We now recognise, however, that e-safety risks are posed more by behaviours and values online than the technology itself. Our approach must therefore shift: rather than restricting access to technology, we need to empower learners to develop safe and responsible online behaviours to protect themselves whenever and wherever they go online.." [Becta, 2009a]

The support for this approach is based upon the premise that young people educating and supporting each other will build upon the knowledge and sophistication that they already have, thus making the encouraging of safe online behaviours much more likely. Tynes [2007] has already identified that key strategies that engage the young people themselves are more likely to succeed, moving away from the e-safety initiatives at that time that encouraged parents to restrict or ban their children from the online space. Whilst Tynes [ibid] was contemplating young people in the US, Sharples et al [2008] looked to the UK and found that young people were well aware of the dangers but were frustrated at not being trusted to self-regulate.

Peer education is one such method that has already gained ground in encouraging safe behaviours. With a quick search on Google Scholar with the term "peer-education" a substantial amount of literature can be found based in the social care and health education fields. Dodge and Prinstein [2008], in their introduction cite "persistent findings in the social science literature" where peers have positive influences on each other's pro-social behaviour. Their reasoning is that it is due to homophily, the way that social contact works between like-minded individuals. Within the UK youth field, research conducted by Davies and Cranston [2008] on behalf of the UK National Youth Agency suggests that youth work is suited for supporting peer education and mentoring approaches by providing space for reflection in addition to approachable support.

There have been concerns raised that there is little in the way of evidence of whether peer education approaches really work [Parkin and McKeganey, 2000]. Their point is that whilst there is overwhelming support at many government levels, but there has been a lack of clear evaluation criteria as to the effectiveness in the short, medium and long terms. Whilst these concerns were raised over 9 years ago, there is little in the way of literature to suggest that these concerns have been met.

There have also been issues raised about the methodological and analytical problems surrounding the use of peer led initiatives within the schools environment. For example: problems have been identified with the logistics of training and delivery including:

- changes in the timetable;
- exam periods;
- work experience;
- illness.

The content and style of the peer-led sessions is outside of the influence of those running the research project and therefore may not suit the research focus. In many cases the majority of information is delivered by adults with peers backing up any social factors and there is also a need to determine how the peer-led programme could be sustained outside of the research programmes in the normal school structure [Mellanby et al, 2000]. These issues were encountered during the course of the project and are included in the discussion on the findings in the sections below.

Having accepted that the requirement is to change young people's behaviour, and that peer education is a potential route for doing this, there arises some specific issues when contemplating peer education in the context of e-safety. This not only raises concerns about potential effectiveness, but unique to this context there are also concerns raised about protecting the peer educators themselves. To explore this further, the different interpretations of what exactly "peer education" means needs to be examined.

The starting point for peer education is the desire to create a process to build upon an existing route of information exchange, whether formal or informal. They key point is that it involves the same social group or individuals of similar social standing educating each other [Parkin and McKeganey, 2000]. These individuals are not professionally trained teachers and but their role falls into that of educating, passing on information that is important. When Cowie and Wallace [2000] discuss how young people generally motivate each other within the context of a supportive, reciprocated friendship, they discuss two different approaches as to how this happens:

- 1. Emotional support and/or
- 2. Education and information providing.

It could be seen that some of the elements required for the first category, that of emotional support, are now incorporated into the PHSE and Citizenship curriculums promoting pro-social, cooperative behaviour. Peer mediation and conflict resolution are being used in some schools, but not in all as this research outlines later in the findings. Equally as important is the approach to educating and providing information, and this could be considered in both formal and informal contexts.

3.1. E-Safety

When considering the e-safety landscape a tremendous amount of activity has been taking place since the release of the Byron Review [2007]. As mentioned in the earlier section setting the background, this has led to the creation of the UK Council for Child Internet Safety [DFCSF, 2008].

It is accepted that engagement with young people is desirable and that there are approaches that just do not work: such as curtailing activity online [Tynes, 2007] and blocking software making no difference [Fleming et al, 2006]. Indeed Willard [2009] emphasises the failures of approaches that have relied on technology fixes rather than a holistic approach. There are e-safety messages based on the fear factor [LaRose et al, 2008], and at the time of writing the current ThinkUKnow program from CEOP is based on predation. There are software providers providing monitoring software aimed at schools who propose their product as the answer to Cyberbullying and threats². Other approaches include the walled garden approach such as provided by Intuitive Media and Yoursphere.com providing social networking facilities where adults are not allowed.

² http://www.securus-software.com/ or http://www.netsweeper.com/

4. Research Overview

Having established that the advice is to engage more young people in looking after their own safety online, and one of those options in doing that is to examine how they might help or influence each other, the next step is to consider exactly how that might happen. This section describes how the project was designed taking into account the concepts described in the peer education and e-safety landscape section above.

The research project set out to explore attitudes towards online safety and security, and to evaluate a peer-led Internet safety programme for 14 to 16 year olds. The original proposal set out two main phases of the project:

- 1. To have a programme of school visits using focus groups and awareness raising workshops to ascertain the levels of understanding and attitudes to online safety and security.
- 2. To invite student representatives to become E-Safety Ambassadors where they would engage with the research team and the University in developing their own resources and approaches to delivering the e-safety message.

During the initial discussions with the participating schools, it became evident that the approach of having discussions with a small number of students to start with would not be possible. This was due to staff and timetabling constraints. The discussion groups therefore had to be designed to fit into the existing class structure and also to be combined with the awareness raising activities to provide curriculum support. The groups were designed so that they were divided into sections that allowed semi-structured interviewing of the group, along with some group activity. This approach allowed the researcher to ensure that those confident in discussion forums could present their views, but that also opportunities arose for those who were not so confident to contribute to the discussion.

It was important that a strong ethical framework was put into place to ensure that no harm was inflicted on young people as a result of the research. All members of the research team were CRB checked and documentation prepared for obtaining parental consent for participation. When considering how the discussion group activities were to be run, clear withdrawal guidelines were put into place so that students could opt out – this approach was used in differing ways in the schools as will be described in the findings sections below.

Inviting student representatives to become E-Safety ambassadors was a pre-determined approach for this research. These Ambassadors were primarily from the year ten in the participating schools and were considered by the teachers as suitable representatives. The Ambassadors were to be responsible for delivering the peer approach as determined by the school. Throughout the project materials were disseminated to the Ambassadors through the project website³ as well as interactions with the research team.

³ www.esafetyambassador.org

4.1. Measuring young people's attitudes to online safety and security

To fulfil the first of the aims of the research, that is to identify young people's attitudes to online safety and security, a measure of how the understanding of risk was constructed was set out to be measured. The assumption here was that the understanding of risk has an effect on motivation and behaviour, thus encouraging safe online behaviour. One of the issues here is that identifying risks is a highly subjective, human interpretation of a situation, what is a perceived risk for one person is not always perceived in the same way for another, with context playing an important role. Individuals react differently to the same hazards and also define hazards in different ways depending on where they identify themselves socially and how much power they feel they have [Summerton and Berner, 2003]. In addition to this, in some situations, communicating risk can fail to motivate safe behaviour [LaRose et al, 2008], and whilst mass media have a crucial role in raising awareness about Internet risks, there is a tendency for the individual to externalise that risk and feel that they are less likely than their peers to be affected by them [Joffe, 1999].

Measuring the perception of risk required the concept being broken down into measurable elements achieved by combining a series of qualitative and quantitative measures taken at the varying stages of the research project. The measures included collecting information on the following:

- measuring the attitudes of the participants in terms of the number and range of risks identified;
- by using a 1,2 and 3 ranking allocation to determine how the participant viewed the likelihood of the risk affecting them;
- considering the number of protection mechanisms they might employ;
- measuring how the participants would respond to characters in a virtual world; and
- the choice of the type of activities to promote e-safety.

4.2. Measuring the effectiveness of awareness initiatives

Another aim of the project was to consider how effective the current awareness activities were. 2008 was a year of tremendous activity, CEOP released new resources in the format of Hectors World and new ThinkUKnow videos, Childnet International updated their KnowItAll resources⁴ and the South West Grid for Learning collect together the latest contributions to the field at http://www.swgfl.org.uk/safety/safetynewstuffyp.asp?page=yp_newstuff. Considering how to evaluate the effectiveness of these initiatives is a recurring theme, one that the researcher has heard in discussion at conferences such as the SWGfL E-Safety conferences or the Insafe training event. Given this changing and very fluid landscape, this report considers current awareness initiatives:

- by asking participants in the early discussion groups to evaluate four key websites;
- by considering the activities that the Ambassadors carry out for themselves;
- from the information gathered from educators at the SWGfL conference and
- from the evaluation questionnaire conducted at the end of the project.

⁴ More on their activity found at http://www.childnet-int.org/news/

4.3. **Designing the Evaluation**

An evaluation framework was developed to explore some of the concerns raised about the use of peer education in Parkin and McKeganey [2000] and Mellanby et al [2000]. Measures to capture knowledge of e-safety, attitudes and behaviour were developed through the collection of demographic information and an exploration of confidence and subject knowledge. The purpose was to ascertain how a sustainable model of peer education might be created within the schools and this required that the design held a number of assumptions. These were that:

- 1. Peer influence was stronger than that of adults;
- 2. Peer education was being used as an umbrella term that covered a range of different approaches that included:
 - a. Peer training;
 - b. Peer facilitation;
 - c. Peer counselling;
 - d. Peer influences;
 - e. Peer helping and support.
- 3. Influences on behaviours were taking place through informal social learning, social inoculation and the establishment of social norms.

This required exploring the perceptions of three key groups of individuals which were:

- 1. Teachers
- 2. Ambassadors
- 3. Pupils within the school

To encourage as many responses as possible and to account for the amount of time that individuals would have to respond, a variety of mechanisms were used to collect evaluations. These included:

- An online survey;
- Scenarios based on the Becta e-safety dilemmas [2009b].
- a quiz.

The final element for evaluation was used at the Ambassador's day held in March using a mixture of approaches to gather responses which included questions on flipchart paper, and asking for e-safety questions and responses on individual cards.

The evaluation framework was designed to measure responses for achieving the second key aim of the project. This was to consider "are peer ambassadors effective agents for changing attitudes and online behaviours". The measures put into place here have been described above in the evaluation framework, that is considering the effect of the project on teachers and ambassadors.

An additional measure arose during the course of the research in the form of concerns about using peer-led initiatives. These formed the basis of an understanding as to why peer schemes might fail in some contexts, if for example concerns were not met. These concerns were collected from key

education staff attending the E-safety conferences by SWGfL as well as representatives from the Nodes at a Train the Trainers event for the Insafe foundation.

The Ambassador's achievements combined with consideration as to the potential for the dissemination of their activities was included in the evaluation measures. Dissemination was considered in terms of scope, whether this was within the school or further afield along. Their opinions of those activities were felt to be important. In addition, a count of the number of public profiles with key identifiable personal information was used as a measure of the impact on behaviours of the individuals within their class.

5. Implementation

When the project was designed, the following approach was envisaged as illustrated in Figure 2. Throughout the implementation this approach was revisited and re-evaluated to consider suitability. The only change to that original plan that was found to be needed was the combining the awareness workshops with the discussion groups and the first Ambassadors day. This was due to the time constraints that the schools had. Awareness support was also provided through visits made by the research team to each of the Ambassador teams in the schools.



Figure 2: Structure of the original research plan

5.1. Materials and Invitations

At the start of the project, fifteen schools were invited to participate in the project and eight responded positively. These schools were:

- Coombe Dean
- Heles
- Newton Abbot College
- St Boniface
- Stoke Damerel
- The Ridgeway
- Torquay Girls Grammar
- Truro High School for Girls.

More details of the participating schools and their interactions with the project can be found in Appendix B. Within each school, interaction was primarily through one key contact, in all but one case this was the ICT teacher. The one case that was not the ICT teacher was a member of staff involved specifically in the peer mentoring scheme.

One point to note is that Truro High School for Girls, dropped out of the project in November 2008, due to a lack of engagement by the pupils. Their data is included in the discussion group findings. In addition at the end of the project another school, Newton Abbot College was not able to engage

with the presentation day at the end of March 2009 due to the final Ambassadors day taking place on a non-pupil day and no member of staff was available to accompany the ambassadors.

5.2. Awareness workshops and focus groups

Once the discussion groups had been carried out, open coding of the discussions began. Originally when contemplating a coding framework for the risks and threats the structure as used by Becta [2008b] was the first choice. This used the following categories:

- Content considering what is uploaded and downloaded;
- Commerce scams, identity theft and commercialism;
- Contact grooming, sexual and race hatred;
- Culture Cyberbullying.

However, on examining the responses from the discussion groups, it became evident that this framework did not fit the concepts emerging from the discussion. Therefore a different focus and framework was created based on the commonality between those emerging concepts that would better serve as a framework to understand the emerging data. Therefore the categories for understanding risks in general terms became:

- Cyberbullying
- Identity Frauds
- Internet Attacks
- Social Networking

5.3. E-Safety Ambassadors and Ambassador days

Between the two Ambassador days held at the University, support visits were carried out to each of the schools with the researcher spending time during a lesson talking through with the Ambassadors how their e-safety activities were progressing, identifying their needs and providing awareness support where necessary.

During the course of the project current online safety awareness strategies and initiatives were explored and collected for use with the Ambassadors were necessary. Resources were collected together and used during support visits to the school and left with the Ambassadors for their own use. Links to online resources were placed on the site and these included news reports as well as important links as highlighted by the Becta Safetynet discussion list.

The evaluation framework was put into place and the URL for the survey site was distributed amongst all Ambassadors and key teacher contacts. The questions asked within the survey are repeated in Appendix A. The Ambassadors day in March provided an opportunity to elicit feedback on the project. During the morning after the ice-breaker games, cards were handed out to each ambassador. They were asked to write down one e-safety question, hand the card to the person on their left and then to answer the e-safety question on the card they had received. These were not read out properly during the course of the morning but were then collected and formed part of the data discussed below. In addition to the individual questions, the whole group were asked to respond to a set of questions placed on flipchart paper in the room.

5.4. Project Website

The support website for the project was created using the Joomla open source framework chosen for its ability to have a site up and running very quickly and so to reduce development time. The aim of the website was to provide a forum for the ambassadors to communicate with each other and to disseminate resources. The community facility was created within the site to provide support for the interaction between the ambassadors. Each of the schools were asked to create a web-page which arrived either as a link to their own school website or as a page to be inserted into the site.

5.5. Dissemination

Local radio publicised the project on three separate occasions: the first being a report of the initial esafety ambassador's meeting; the second as series of discussion pieces highlighting the positive contribution of young people in society; and the third as a wrap up session discussing the findings of the project linked with the release of the Cybermentors.org website.

Another of the opportunities arising was to share preliminary findings for the project through the South West Grid for Learning E-Safety Conferences around the South West. During the course of these conferences it was possible to engage with teachers to learn more about their concerns surrounding e-safety and peer support. This data is included in the discussions and findings below. Another opportunity arose where the Insafe⁵ foundation invited the researcher to present the project to the Training the Trainers seminar in Riga. There was an opportunity to explore European concerns surrounding the use of peer education at this event, and this is also included in the discussions below. Papers regarding the project have been accepted for presentation at the 8th Annual Security conference in Las Vegas, and the EU Kids online conference at the LSE in June.

⁵ www.saferinternet.org

6. Perceptions to online safety

The first of the aims of the project was to ascertain the attitudes held by young people towards online safety and security and to evaluate how effective current awareness activities were. This section discusses the measures taken and the values discovered. The implications for these measures are discussed more fully in the section on discussion.

As mentioned above the measures to were taken as:

- 1. measuring the attitudes of the participants in terms of the number and range of risks identified;
- 2. by using a 1,2 and 3 ranking allocation to determine how the participant viewed the likelihood of the risk affecting them;
- 3. considering the number of protection mechanisms they might employ;
- 4. measuring how the participants would respond to characters in a virtual world; and
- 5. the choice of the type of activities to promote e-safety.

6.1. Measuring number and range of risks

These measures primarily emerged from the discussion group data. It became evident during the collection of responses to the first question "what is e-safety" that the participants articulated these in terms of understanding threats and that e-safety concerned itself with mitigating these threats. This has led to the responses for measuring the perceptions of risk to be included alongside the responses to the second question which was "are there any dangers on the Internet?".

In total there were 130 risks identified with, as one would expect, a considerable amount of overlap. To measure this risk data in a way that accounts for the difference in class sizes, the total number of risks identified at each school were divided by the number of participants to be expressed as shown in Figure 3 as a frequency of risks identified. It was evident from this data that we had a situation in two schools where the young people concerned were more aware of risks than in the other schools. On closer examination of the transcripts of the discussion groups there were clearly one or two individuals who had a substantial amount of technical knowledge within the discussion groups, where in the other schools it appeared that the technical knowledge was more evenly spread with no one person dominating the discussion.

Using quantitative analysis to explore a subjective phenomenon has limitations, not least that it is just not possible to consider all the variables that would need to be considered that make up the rather subjective risk concept [Cresswell, 1998; Ashby, 1958]. However, the value here is in gaining an idea of the number and range of risks rather than to create any generalisable theory. The median value here is 14.5 with the average being 16.3. The median value is taken as a useful measure here because the average is skewed by one of the schools. It would be fair to surmise therefore that half of the schools involved in the project could demonstrate a very good awareness of risks.





To measure the range of risks identified, a pivot table was used to quantify the risks into each of the four identified categories. The data is illustrated by the graph in Figure 3.



Figure 4: Range of risks

Within each of these schools perceptions of risk were increased in some areas more than others. For example Coombe Dean participants were more aware regarding social networking threats than the Truro High School for Girls (THSG) participants; but those girls at THSG along with the Stoke Damerel participants were all very aware of Internet attacks.

6.2. Ranking Risks

The next measure to add to the risk picture is that of the perception of the likelihood of occurrence of these risks. These perceptions were discussed in more depth in the interim report and as discussed in that report, the dangers were ranked in the following order:

1. Internet attacks

- 2. Cyberbullying
- 3. Social Networking threats
- 4. Identity fraud.

To measure the range of likelihood of occurrence of risks for each school, a pivot table was used to quantify the risks into each of the four identified categories. These were expressed as percentages of the total risks identified by that school to take into account the difference in group sizes. The data is illustrated by the line graph in Figure 5.





Here it can be seen that half of the schools felt that Internet attacks were the ones most likely to affect them. One school felt social networking issues were more likely to affect them and two schools felt that Cyberbullying issues would be the most likely.

6.3. Number of protection mechanisms

When the participants in the group were asked the question "who protects you?" the answers fell into four main categories as illustrated in Table 1.

Category	%
People	41
Software	38
Organisations	20
Hardware	1

Table 1: Who protects you?

A pivot table was used to analyse the contributions from each of the schools as has been done in the measures above. These values are represented below in Figure 6.



Figure 6: Who protects you?

Of interest is the spread of perceptions of who protects the participants. Four of the schools, and these included the three gender specific schools, suggested that software was the most prevalent form of protection. Software protection suggestions were: firewalls; filtering; and anti-virus. Two of the schools put people and organisations ahead of software and hardware with one school considering people were first and foremost with organisations being behind software. What can be ascertained from this data is the perception that protection mechanisms are balanced between use of software and the actions of people.

6.4. Responses to virtual world characters

The responses to the virtual world characters were discussed in depth in the interim report and those discussions are included here with the purpose of adding them into the risk model being explored.

There were only a few participants who had engaged with virtual worlds, the most popular being Runescape or World of Warcraft, some had used Habbo hotel or Club Penguin. Participants were shown four avatar figures from a virtual world and asked what their initial perceptions of those individual were. The figures are shown in Figure 7 and the analysis of the responses are considered below in Figure 8: Engaging with virtual characters. Not all participants responded to all of the avatars and therefore there are an uneven number of responses across the set.

A recurrent theme to the response to the second avatar, the elderly figure, was that old people were not normally to be found on the Internet and so therefore this figure should be viewed with suspicion and was probably not as they seemed. However, the first avatar, the smartly dressed young lady and figure 4, the man, were both accepted primarily, as they appeared but with most participants being prepared to speak to the woman rather than the man. In each group, there were individual who would check profiles before engaging with the avatars and others who viewed all avatars with suspicion.





Figure 7: Avatars from the virtual world "There"

Using participants' responses as a measure for perception of risk is in itself a subject-laden exercise and it is worth questioning the usefulness of including it here. The reasoning behind using this measure is to see how risk perceptions translate into actions, that being whether the participants would engage with the avatar in the virtual world or not. Given that these questions were being asked in a session designed to explore internet safety, it is no surprise that the answers were weighted in terms of being cautious, however, what was interesting to emerge was the reasons put forward as to why they would not engage which are discussed in more depth in the interim report. Figure 8 illustrates the range of perceptions shown in the schools. Interestingly only one school came out as being more prepared to talk to the avatars shown than not. One school demonstrated extreme caution with a large number of responses being negative for engaging with the avatars.



Figure 8: Engaging with virtual characters

6.5. Choice of e-safety activities

During the initial Ambassadors day in October, the session generating ideas for what the ambassadors wished to achieve demonstrated their enthusiasm for tailoring the e-safety message for themselves. None of the suggestions were to use any specific resources.

Four out of the six schools who presented at the Ambassadors day in March had created websites to disseminate their work, and two schools made their own videos to share. One school created a display stand to engage parents and students on a parents review day, a day when all parents were visiting the school with their child to hear about their progress. From this initiative a parental survey was held and this was combined with a survey of the whole of the year 7 based on the CEOP ThinkUKnow framework. In this survey 70% of the respondents had found it internet safety lessons useful.

During the final e-safety ambassadors day the comic strips created to highlight e-safety issues mostly concentrated on some form of bullying with 5 out of the 6 strips highlighting this theme. Only one of the strips specifically identifies the Cyberbullying context, that is the technological delivery of the problem. This one is included below for illustration with the others in Appendix C. The other strips were described by the students in the session as being pertinent to Cyberbullying, and the prevalence of the topic would suggest its importance in their minds.



Figure 9: Selected comic strip from Ambassadors Day

6.6. Evaluating effectiveness of online initiatives

As discussed above, the measures used in evaluating effectiveness of online initiatives have been drawn from the following sources:

- participants in the early discussion groups evaluate four key websites;
- Ambassadors activities;
- information gathered from educators at the SWGfL conference; and
- evaluation questionnaire.

The evaluations of the four key websites provided an opportunity for students to critique some key resources in the area. These are summarised below:

GetSafeOnline.co.uk

Good	Improve
Easy to use and understand	Use less text
Informative	Remove the term cybersuckers
Adult focused	Make the quiz less patronising

Digizen.org

Good	Improve
Based on 4 teenagers and does not look childish	Reduce amount of text
Can create own widget	Make it more than one colour
Lots of information, easy to read	Add more pictures

InternetSafetyZone.co.uk

Good	Improve
Good graphics	Forms – not secure and required personal
	information
Useful information	Needs more pictures
Sad but helpful	Unclear hyperlinks

ThinkUKnow.co.uk

Good	Improve
Colourful	Trying too hard to be cool
Aimed at different ages	Needs more colours
Would not change anything	Remove waffle on homepage

 Table 2: Evaluation responses on key websites

What did emerge here was that students had not spent time looking at these sites before and in each of the groups there were some participants who were interested in exploring those sites further.

When examining the resources that the Ambassadors had created for their own use, no one publicly available resource was an obvious favourite. Of the four websites, three of them linked to external sources and of those three the only publicly available resource to appear more than once was the Childnet SMART rules which were seen twice.

As mentioned above e-safety initiatives have been prominent during the course of the project with a lot of change happening. One of the issues that this brings was highlighted by teachers in terms of the problems when trying to keep up to date with this rapidly changing landscape, not just in e-safety terms but in general terms of trying to understand the technologies. 8% of responses to the survey of teachers concerns outlined the problems with trying to keep up. A selection of the comments made were:

"Keeping up to date with the progress made and uses by children and young people" "Understanding the new social network sites. Keeping up with new uses and methods (idea of mashing things together). The mobility of teaching"

"Pace of technology. Children's exponential knowledge - keeping up with it!" "Keeping up to date myself as I don't use these technologies personally - don't want SN site"

6.7. Summary

The first aim of the project was to assess young people's attitudes to online safety and security and to ascertain the effectiveness of the current awareness initiatives. What has emerged to answer this question has been:

- Half of the schools are well aware of the online risks.
- Each school had pupils who could demonstrate different strengths of awareness with no one key area dominating the whole group of schools.
- Internet attacks were deemed more likely than either Cyberbullying, social network threats or identity frauds yet many chose Cyberbullying for their awareness activities.
- They were well aware of the need to turn to people for protection, but were also relying on software.
- There was cautious behaviour as demonstrated by the engagement with the virtual world avatars.
- No one resource emerged as prominent or favourite.
- Keeping track of the current awareness raising initiatives was a challenge during the course of 2008 given the amount of resources published, a problem identified by teachers.

7. E-Safety Ambassadors

The second key aim of the project was to evaluate whether peer Ambassadors were really effective agents for changing attitudes and online behaviours. This section considers the measures and the values collected with further discussion on the implications included in the section on discussion.

The measures deemed suitable for assessing whether this aim was met were described above and were:

- To examine the effect of the project on Teachers and Ambassadors
- To explore the concerns raised about the use of peer ambassadors
- Consider the participants opinions of their achievements
- Consider the potential for Ambassador activities for dissemination
- Explore the impact as demonstrated through the number of public profiles

7.1. Effect on Teachers and Ambassadors

There was no doubt that during the course of the project the teachers involved worked very hard within the constraints of their own workloads and timetables. During the course of the project, the research team worked to ensure that support was given for the e-safety activities and that they would fit into the requirements of the curriculum where necessary in an attempt to support the teachers in their workloads. The different approaches to the activities that the ambassadors were able to conduct clearly indicated the amount of time that the teachers were able to put towards the scheme.

Emerging from both the online survey and the discussions at the Ambassadors day in March it was clear that the teachers felt benefit for their school had been achieved on two counts. The first was that this project gave their e-safety dissemination in the school a starting point, and the second was the chance for links external to the school that could give support. One teacher in the response to the survey outlined the benefits as:

"Collaboration with experts from the University for both teachers and students. The chance for students to visit the university and experience 'life' outside school. The students being able to collaborate with students from other schools."

To explore the impact on the Ambassadors themselves, their levels of engagement throughout the project and their knowledge as expressed during the March Ambassador's day were assessed.

At the initial Ambassadors day in October 28 young people attended and participated in the training. Of those who responded to the online survey, there were 9 out of 15 respondents who had volunteered to be Ambassadors. In March, there were 25 attending with one school unable to send their Ambassadors. During the course of the research one school had an additional ambassador join their team. In one school, the Ambassadors who attended the University cascade trained others in their ICT class and engaged the whole class with the creation of resources for use within the school. To minimise the work overheads these resources fitted into the ICT curriculum and were forming part of their coursework. In another school, there were changes to the individuals involved throughout, but the overall number of ambassadors from the school remained the same. Their resources they created too fitted into the remit of their ICT coursework.

7.2. Concerns

It is worth considering the concerns raised by teachers and key professionals in the field as potential barriers for how effective peer ambassadors might be. This information has been gleaned from interactions during the SWGfL conferences and the Insafe training event held in Latvia.

The concerns raised by the key educators fell into eight key areas. These key areas are represented below in Figure 10. The primary area of concern was on how to get others to take responsibility, something echoed in presentations delivered at Insafe. Some key quotes highlighting this area of concern are:

"How do I make colleagues realise it is all our responsibility?"

"Majority of our parents are unaware of what is going on. They expect us to manage the safety when at home and vet for them."

"Battle the withdrawal attitude with senior manager luddites"

"Excessive amount of time in school spent on sorting out arguments which happen out of school on MSN etc"





Educators also raised concerns about their own levels of knowledge and how to encourage levels of knowledge across the school for children and at home for parents. Balance was another key area of concern, making sure there was a balance between providing protection for children and young people and at the same time encouraging them to embrace all the advantages that the technology can provide.

"The challenge is to find the happy medium, walled garden versus filtered cell"

"Empower the students or protect them. Can we do both? "

"In enhancing the use of ICT in education we are promoting its use but face the barriers of school interpretations of e-safety"

Naturally there are concerns about how Ambassadors can deal with serious situations. The Teachers involved in project protected their Ambassadors in different ways. In one school the messages to the e-safety team were filtered and delivered to the appropriate person. In another school, the Ambassadors concentrated on providing resources through their website for use by the teacher when educating the younger pupils of the school. These resources included their own tips on safety as well as links to established sites such as Kidsmart or the BBC. In the interviews at the schools with all of the Ambassadors it was clear that they were aware of how to refer to their supporting teacher for areas that they were not happy with.

7.3. Ambassadors opinions

Part of the March day involved the Ambassadors contemplating a question and answer session surrounding e-safety questions they might have had posed to them or like to ask. These questions demonstrated a breadth of knowledge with five of the questions being the same. Their questions and responses are copied below in Appendix D.

In the final evaluation, all Ambassadors had enjoyed their activities, some carrying them out in their own time. The response to the question "was there an e-safety activity you did not enjoy" was an overwhelming – No. One commented that they were "all brilliant". Of most interest were the responses to what the Ambassadors had felt they had learnt, as indicated in the table below, many of them felt they had not learnt anything new, but there were plenty who had learnt plenty on e-safety.

Question	Response
I would like to learn more about e-safety	6
I have learnt plenty about e-safety	7
I have not learnt anything I did not already know about e-safety	10

 Table 3: Evaluation responses on ambassadors learning

7.4. Potential dissemination activities

The activities carried out by the Ambassadors are evaluated here for their potential reach and potential for dissemination. Four out of the six schools who presented at the Ambassadors day in March demonstrated their websites. These were public facing websites with the potential to reach many people interested in their school. Coombe Dean Ambassadors were invited to a conference for Safer Internet Day and were able to tell the conference about their use of ICT⁶. The impact within the schools themselves was seen in the responses to the survey where ambassadors from five of the schools talked about the assemblies they had been involved with. In three of the schools the Ambassador presentations formed part of the assemblies during the Internet Safety week in February 2009.

As part of being involved with this particular research project, shareable resources have been uploaded to the project website for further dissemination.

⁶ http://www.thisisplymouth.co.uk/education/Internet-child-safety-conference-Plymouth/article-684955-detail/article.html

One of the evaluation questions asked the Ambassadors what they would wish to do next year, 8 responses concentrated on wanting to help more people, with 3 responses stating they wished to teach new people to take their place.

7.5. Public profiles with key identifiable information

As described earlier prior to each of the discussion groups a measure of the number of public profiles of the participants was taken. At the end of the project, these public profiles were reviewed to ascertain if they had remained, or whether they had changed from public to private. At this point Truro High School for Girls is excluded from these figures because they did not complete the project.



Figure 11: Percentage decrease for public profiles

Coombe Dean demonstrated the greatest impact on this measure, with all the profiles that had been public at the start of the project being changed to private. Hele's show as no decrease here because they did not have any public profiles at the start of the project and finished the project in the same way. The other schools show decreases in public profiles that are less dramatic, but still a reduction.

7.6. Summary

The second aim of the project was to assess the effectiveness of peer-led internet safety initiatives within the school context. The emergent findings to answer this question are:

- The teacher is obviously key to making the project work providing key information about how to tailor it to their school.
- Project retained the interest of those who became E-Safety Ambassadors with the total number increasing by one.
- Worked well when integrated with GCSE coursework and the curriculum delivery.
- Teachers concerns about areas of responsibilities need to be addressed.
- Many Ambassadors did not learn anything they did not know already.
- Websites were a chosen method for disseminating further and Ambassadors were keen to pass on their knowledge.
- A reduction in the number of public profiles was seen.

8. Conclusions and further work

The picture presented above is one that represents the technologically savvy young person and the ambassadors project has been privileged to benefit from hard working teachers and Ambassadors. The young people who chose to be Ambassadors along with those who were chosen by their teachers have demonstrated their capabilities with the technologies. The perceptions of risk as demonstrated above have been very clear, with schools concentrating on different areas. Naturally the perception of risk is by its nature a very complex model and there are limitations as to how it is represented here. For example, if the risk perception measures for not talking to avatars were taken it might be considered that these young people were a very risk-averse group. However, examination of how many public profiles were in place at the start of the project dispels this theory.

This project has provided a beginning from which benchmarks to understand young people's perceptions to online safety and security may be gleaned. It has also been able to provide an impetus to affect more young people than might have otherwise been possible to do. Supporting teachers in their delivery of these messages has been key and this project has ensured that they have external support to do that. The impact is felt in being able to combine not just the expertise that the young people have in the technologies that they use, but to bring in different spheres from the other schools engaged in the project, along with expertise from the field in the form of connections to the University of Plymouth, thus complementing current initiatives from Plymouth Children's Services and the South West Grid for Learning.

One of the learning points was about the use of resources, a key decision was taken early on that no new resources were going to be created given the large variety of resources available. However, in each school, the activity of Ambassadors creating their own e-safety resources helped not only raises their knowledge and understanding but also personalised the message. Measuring the effect of any informal learning arising from these activities however is very difficult.

It is clear from the findings presented above that there are many different ways of getting the esafety message across. Each of the schools had a slightly different approach. Peer ambassadors may be effective agents for influencing behaviours, but they are not the only mechanism and form part of a toolkit for a cohesive, whole school approach.

9. References

Ashby, W.R., (1958), Requisite variety and its implications for the control of complex systems. Cybernetics (Namur) Vol1. No 2. Quoted in Heylighen, F., (1992) Principles of Systems and Cybernetics: an evolutionary perspective, in Cybernetics and Systems '92. Trapple, R. (Ed) World Science, Singapore, p3-10

Becta, (2006), Safeguarding children in a digital world: Developing a strategic approach to e-safety.

Becta, (2007), Safeguarding children online: a guide for local authorities and local safeguarding children boards, http://publications.becta.org.uk/display.cfm?resID=31049

Becta, (2008a), Harnessing Technology Review 2008: The role of technology and its impact on education. Summary Report. Becta.

Becta (2008b) Mobile phones and Camera phones. http://schools.becta.org.uk/index.php?section=is&catcode=ss_to_es_pp_mob_03 (accessed December 23, 2008).

Becta, (2009a), AUPs in context: Establishing safe and responsible online behaviours, http://publications.becta.org.uk/display.cfm?resID=39286

Becta, (2009b), e-safety? Isnt' that just blocking some website? http://www.slideshare.net/becta_feandskills/esafety-isnt-that-just-blocking-some-website.

Bryman, A, (2004), Social Research Methods Second Edition, Oxford University Press, Oxford

Byron, T (2007) Safer Children in a Digital World. London: UK Government.

Cresswell, J.W., (1998) Qualitative Inquiry and Research Design. Sage. California.

Curry, A., (2005), Action research in action: Involving students and professionals. In proceedings of World Library and Information Congress, Oslo, Norway. 14 - 18 August 2005

Davies, T., and Cranston, P., (2008), Youth Work and Social Networking: Final research report. National Youth Agency. September 2008. http://blogs.nya.org.uk/ywsn/final-report.html.

DFCSF, (2008), Government Launches New UK Council for Child Internet Safety, Department for Children, Schools and Families, 28th September 2008, http://www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2008_0215

Dodge, K, Prinstein, M., (2008), Understanding Peer Influence in Children and Adolescents. Guilford Publications, New York.

Fleming, M.J., Greentree, S., Cocotti-Muller, D., Elias, K.A., Morrison S., (2006) Safety in Cyberspace: Adolescents safety and exposure online. Youth and Society. 2006. Vol. 38. No. 2. P135. Sage.

Joffe, H., (1999) Risk and the Other, Cambridge University Press

Kennedy, T. L.M. Smith, A, Wells, A.T & Wellman, B (2008) Networked Families. October 2008. www.pewinternet.org/PDF/r/266/report_display.asp

LaRose, R., Rifon, N.J., Enbody, R., (2008) Promoting personal responsibility for Internet Safety. Communications of the ACM. March 2008. Vol 51. No. 3.

Lennox, F, (2008), Growing up in a digital society: Children and Young People's Media Literacy Skills, Ofcom, WISEKIDS, Swansea, 20th October 2008 <u>http://www.wisekids.org.uk/conf/speakers/presentations/fionalennoxSwansea2008.pdf</u>

Livingstone, S, (2003), <u>Children's</u> use of the internet: reflections on the emerging research agenda, In New Media & Society, 5 (2), p147-166, Sage

May, T., (1993) Social Research: Issues, Methods and Process. Open University Press, Buckingham. NCH and Tesco Telecoms, (2006), Get I.T safe: children, parents and technology survey 2006, http://image.guardian.co.uk/sys-files/Education/documents/2006/07/17/NCHreport.pdf

Mellanby, A.R., Rees, J.B., and Tripp, J.H., (2000), Peer-led and adult-led school health education: a critical review of available comparative research, Health Education Research. Vol 15. No 5. pp533-545.

Parkin, S., McKeganey, N., (2000), The Rise and Rise of Peer Education Approaches, Drugs: education, prevention and policy. Vol 7 No. 3, 2000.

Sharples, M, Graber, R, Harrison, C, & Logan, K (2008) E-Safety and Web 2.0. Research Report, Becta.

Sommerton, J., Berner, B., (2003) Constructing risk and safety in technological practice. Routledge.

Staksrud, E, Livingstone, S, & Haddon, L (2007) What Do We Know About Children's Use of Online Technologies? EC Safer Internet Plus Programme, London: EU Kids Online.

Tynes, B.M., (2007) Internet Safety Gone Wild? Sacrificing the Educational and Psychosocial Benefits of Online Social Environments. Journal of Adolescent Research. Vol. 22. No. 6. November 2007

Willard, N., (2009) Why age and identity verification will not work – and is a really bad idea. Centre for safe and responsible internet use. http://www.cyberbully.org/PDFs/digitalidnot.pdf

Wolak, J., Finkelhor, D., Mitchell, K.J., Ybarra, M, (2008), Online Predators and Their Victims, American Psychologist, Feb-March 2008

10. Appendix A – Evaluation questions on survey

Which School are you from? Selected answers were:

- Coombe Dean
- Heles
- Newton Abbot College
- The Ridgeway
- St Bonifaces
- Stoke Damerel
- Torquay Girls Grammar
- Truro High School for Girls

What is your role?

- Teacher
- Ambassador
- Mentee
- Other

Gender

Teachers:

Do you have direct experience of peer support initiatives in your school?

Would you have used a peer support approach for e-safety without being involved in this particular project?

How would you describe your level of expertise in e-safety? Select from Poor, Average, Good, Excellent, Other

Do you think you will continue to have e-safety ambassadors?

From your perspective, what would you say were the good elements of this project?

From your perspective, what could be done better in this project?

Do you think the project could be extended and if so how?

In your school, is e-safety an: ICT Department issue, Child Protection Issue, Everybody's issue, other What extra resource would be useful for you to facilitate this?

Ambassadors:

Have you helped out your friends before?

How have you helped your friends before? On E-Safety, General stuff, relationships, Other

How did you choose to be an e-safety ambassador? I was asked by the teacher, I wanted to do it and volunteered, other

What activities have you been involved in since becoming an e-safety ambassador?

Were these ideas: your ideas, your teachers ideas, other

Have you enjoyed being an e-safety ambassador?

What do you think could be done differently next time?

Would you like to continue to be an e-safety ambassador?

Please write here any suggestions you have for new things that the e-safety ambassadors could do?

Mentees:

What activity did the e-safety ambassadors put on for you?

What do you think you learnt from it?

What did you like about the e-safety ambassador's activity? (If anything)

What would you like the e-safety ambassadors to change? (If anything)

Would you go to another activity run by the e-safety ambassadors?

Why?

Would you like to join the e-safety ambassadors?

11. Appendix B – Participating Schools

Participating Schools

Details of the eight participating schools are given below in Table 4. The details included are current at the time of writing taken from the Ofsted website.

Name	Gender	Number of pupils	Religious	Specialist status
		on roll	character	
Coombe Dean	Mixed	1071	Non-	Maths and
School			denominational	Computing
Hele's School	Mixed	1318	Non-	Language
			denominational	
Newton Abbot	Mixed	1088	Non-	Technology
College			denominational	
St Boniface's RC	Boys	815	Roman Catholic	Science
College				
Stoke Damerel	Mixed	1393	Non-	Maths and
Community			denominational	Computing
College				
The Ridgeway	Mixed	1243	Non-	Science
School			denominational	
Torquay Girls	Girls	860	Non-	Humanities
Grammar School			denominational	
Truro High School	Girls	480	Church of England	Independent day
for Girls				and boarding

Table 4: Details of schools engaged in project

Three schools participated that were gender-specific schools, with two of them having a religious character. One was an independent day and boarding school, with the other five being general mixed, non-denominational schools. Two of these shared the same specialist status of Maths and Computing with the other six each having a different specialist status.

Peer education/mentoring approaches

A variety of peer education and mentoring approaches emerged from the schools, ranging from a very strong theme throughout the whole school to none. The strong approaches included the following elements with the weaker approaches combing two or three of these elements:

- formal training for the volunteers,
- use of mentors for integrating new pupils into the schools,
- feedback into policy making,
- conflict resolution,
- befriending.

Of these eight schools, two of the gender-specific schools had no formal peer education or peer mentoring approaches in place, but all pupils were encouraged to look out for each other. The independent school made use of sixth formers in a more formal peer mentoring capacity with other schools encouraging year 9 and 10 pupils to help integrate the year 7 pupils as they began at the

school. One school previously had a stronger and more focused peer education/mentoring approach than it had now, but it had declined due to lack of resources. They were in the process of addressing that issue and were using a vertical tutoring approach whereby students were in tutor groups mixed by year. Only two of the schools had a very strong peer education approach that included all five of the elements listed above.

Online Safeguarding initiatives

The approach to safety online was found to be broadly similar across the schools. One school acknowledged they had a problem with Cyberbullying and an incident of a pupil physically meeting somebody they had only ever spoken to through the Internet with serious consequences. This school in particular took steps to address the issues that had been raised as a result, had increased their education of young people in online safety and had taken steps to liaise with parents over online safety by arranging an evening with an expert. Unfortunately only six parents demonstrated enough concern to attend. This was not the only school to invite expert speakers in, three of the other schools also had used such an approach both for parents and pupils.

All of the schools were using the resources issued to them through various bodies, the following of which were described:

- PlymKids,
- Plymouth Safeguarding Children's Board,
- CEOP and
- Childnet.

One school in particular had specific interactions with Bebo involving a high profile visit to the school. This was also the school that found itself dealing with a specific bullying incident involving a Bebo profile.

In School Discussion Groups

The discussion groups varied in size between the schools. One school split the participants into two sessions to accommodate the school timetable. In total 202 young people were involved. A breakdown is given below in Table 5.

School	Participant count
Coombe Dean School	17
Hele's School	30
Newton Abbot College	30
St Boniface's RC College	35
Stoke Damerel Community College	21 (13 plus 9)
The Ridgeway School	28
Torquay Girls Grammar School	25
Truro High School for Girls	16

 Table 5: Participants in discussion groups

The format of the session was designed to fit into a school period of fifty minutes duration and was divided into sections of discussion, activity and information dissemination so as to engage the interest of the participants. Prior to the sessions, schools were asked for a list of names of the pupils who would be attending. Two of the schools were not able to provide this list in time for the groups. These names were used to create a montage of photographs and a selection of quotes and

comments taken from public profiles from their group, which stimulated discussion about privacy settings and linkage of public information. The next step was opportunity to look online for information about the researcher, thus facilitating discussions about professional profiles and their use.

The questions the young people were asked to generate discussion were:

- What does e-safety mean to you?
- Are there any dangers on the Internet?
- Rank the dangers identified by the session to consider those:
 - Most likely to happen to them.
 - Could happen to them.
 - Not very likely to happen to them.
- Who protects you?
- Protecting yourself... can you:
 - Tell if there is an anti-virus programme on your machine?
 - Tell if it is up to date?
 - Get rid of a virus?
 - How?
- Do you:
 - Keep your operating system up to date?
 - Change your passwords?
 - Use strong passwords?
 - Know what spyware is?
 - Know what phishing is?
- Online profiles:
 - Do you have any?
 - What do they say about you?
 - How long do they last?
 - What could I find out about you?
- How long does an online presence exist?
- Virtual worlds which do you use?
- Would you talk to the following characters in a virtual world? What are your perceptions of them?

Exercises were given to critique four main websites chosen as primary leaders in internet safety., with a brief to consider what did they like about the site, what would they change about it and would they recommend it to their peers or younger. The sites were:

- 1. www.getsafeonline.co.uk
- 2. www.internetsafetyzone.co.uk
- 3. www.fkbko.co.uk (later www.digizen.org)
- 4. www.thinkuknow.co.uk

During the course of delivering the focus groups however, one website had to be substituted. www.fkbko.co.uk was no longer maintained and www.digizen.org was chosen as an example of a site that parents and teachers would be encouraged to consider. In addition to these questions and exercises information was given about identity theft, privacy protection and where to go for help. The sessions concluded with an overview of the E-Safety Ambassador project.

12. Appendix C – Comic strips

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

13. Appendix D – E-Safety questions and answers

Where is the report abuse button?	On social networking sites
Where is the report abuse button?	Usually on social networking sites
Who can you talk to for help?	parents, teachers, friends
What is a firewall?	It protects your PC
How do firewalls and antivirus software work?	Stops any viruses infecting a computer
How does antivirus software or a firewall protect your PC	It stops viruses
If you could get any celebs involved with e-safety who would it be?	The muppets
How do I keep my website safe?	Ask Shirley
Is your intrernet safe? Is it virus free?	yes
What is e-safety?	Being safe on the internet and making sure your computer is protected
How do you hide your account?	Go on the website and click sign up
How do I set my Bebo profile to private?	Settings, profile visibility and press keep my profile private
What is cyberbullying	Where someone bullies someone else by using a computer, text, phone etc
I have been asked: what is cyberbullying?	Bullying via phones, online or by anything on the internet
What electronic equipment can put you in danger of cyberbullying?	Mobile phones, PCs, iPODS etc
What is happy slapping?	Videoing someone beating up someone
What is happy slapping?	Videoing a abuse for a laugh
What is happy slapping?	Videoing abuse
What is happy slapping?	When you video someone getting beaten up
What is happy slapping?	Video a fight and broadcasting it