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### **I-SAFE EVALUATION**

### **Final Report**

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ABSTRACT

# I-SAFE EVALUATION REPORT ABSTRACT

In 2001 NIJ awarded Caliber Associates a contract to conduct a quasi-experimental, longitudinal study of the effectiveness of the i-SAFE curriculum in teaching children about Internet safety. The design was implemented in 18 schools (12 treatment and 6 comparison schools) in six sites with more than 2000 children. The evaluation had two key components: a process evaluation (including a cost component), and an outcome evaluation. Data were collected through document reviews, interviews with principals and teachers, focus groups with students, and an online survey of Internet knowledge and behavior administered to students in grades five through eight, six times throughout the study period. Findings from the outcome evaluation noted positive and significant changes in knowledge between the treatment and comparison groups, both on average and over time. For the most part, there were no significant changes in behavior between the treatment and comparison groups on all scales. As one of the first research studies examining the effectiveness of Internet safety education on the knowledge and behavior of school-aged children, the findings of this study provide insight into the effectiveness of Internet safety education, and are a first step towards developing a knowledge base about what works in Internet safety education.

**EXECUTIVE SUMMARY** 

# I-SAFE EVALUATION REPORT EXECUTIVE SUMMARY

In the last decade, with increasing access to the Internet and the growing number of American households with home computers, interest in Internet safety, particularly for youth, has grown among researchers and practitioners, alike. However, because Internet safety education is a new area of interest, it is unclear how effective it is in keeping children safe on the Internet.

As a leader in innovative and cutting-edge research and evaluation, in 2001, NIJ awarded Caliber Associates a contract to conduct a quasi-experimental study of the effectiveness of the i-SAFE curriculum in teaching children about Internet safety. Specifically, NIJ was interested in answering the following three questions:

- Do students retain the knowledge received during i-SAFE lessons?
- Do they use this knowledge?
- At what reduced levels or intensities of implementation are program benefits no longer measurable?

As the first rigorous study of Internet safety education (most other studies did not include a comparison or control group), this evaluation was intended to begin to build the knowledge base about "what works" in Internet safety education. In addition, because of its design, it also was intended to serve as a model for future studies of Internet safety. Finally, the evaluation was an opportunity to devise methods for successfully implementing research in educational settings.

The evaluation of the i-SAFE program was conducted using a quasi-experimental, longitudinal design. The design was implemented in 18 schools (12 treatment and 6 comparison schools) in six sites with more than 2000 children. In general, the evaluation was designed to investigate the effectiveness of the i-SAFE curriculum for instilling knowledge in middle school students to assist them to recognize and respond to dangerous or inappropriate online situations. The evaluation had two key components: a process evaluation (including a cost component), and an outcome evaluation. The process evaluation was intended to assess implementation characteristics in each site and to understand the relationship between these characteristics and program outcomes. The process evaluation was built around three questions: (1) How was the i-SAFE curriculum implemented?; (2) Was it implemented with fidelity?; and (3) How is the curriculum perceived in the field? The cost component of the evaluation was designed to assess the costs of the curriculum. Finally, the outcome evaluation was built around three main research questions: (1) Do students retain the knowledge received during i-SAFE lessons?; (2) Do they use this knowledge?; and (3) At what reduced levels or intensities of implementation are program benefits no longer measurable? Data for all three components was collected via document reviews, interviews with principals and teachers, focus groups with students, and an online survey of Internet knowledge and behavior administered to students in grades five through eight, six times throughout the study period.

Findings from the process evaluation suggested that, in general, classroom teachers were responsible for implementing the curriculum during computer/technology classes, although in several schools, the curriculum was taught during library time. Due to time constraints, most often, teachers were not able to implement the curriculum in the recommended number of sessions for the recommended amount of time. In fact, the most common complaint from teachers implementing the curriculum was that there was not enough time in the school day to teach it in the manner intended. Teachers also reported that time constraints forced them to use lecture rather than activities to teach the curriculum. Overall, principals and teachers had very positive perceptions of the curriculum, reporting that it covered a critical and relevant topic. Teachers also felt the training was adequate in preparing them to teach the curriculum. The two major challenges associated with implementing the curriculum were time constraints and teaching children with limited computer experience. Finally, teachers made several recommendations for improving implementation, including making sure to have enough time set aside to teach the curriculum as intended and having the national i-SAFE office provide ongoing training and updated information on Internet safety to teachers implementing the curriculum.

Findings from the outcome evaluation noted positive and significant changes in knowledge between the treatment and comparison groups, both on average and over time. In addition, such factors as race, gender, computer skills, and parental supervision were more likely to have an effect on knowledge regardless of group membership than other independent variables measured. For behavior, the findings were not as positive. For the most part, there were no significant changes in behavior between the treatment and comparison groups on all scales. However, there was very little risky behavior documented at baseline; therefore, significant changes in behavior from pre- to post-test would not be expected, necessarily.

As one of the first research studies examining the effectiveness of Internet safety education on the knowledge and behavior of school-aged children, the findings of this study provide insight into the effectiveness of Internet safety education, and are a first step towards developing a knowledge base about what works in Internet safety education. Based on the findings, the i-SAFE curriculum does indeed increase children's knowledge about Internet safety. Its influence on behavior, however, is not very strong. In addition, there were variations across findings between, for example, girls and boys, and minority students and students from other racial groups. To continue to build on the knowledge base started here, future studies that examine these and other issues related to Internet safety education are warranted. As the Internet continues to be *the* method by which youth and young adults get information, it

behooves the research community to continue to examine methods for keeping youth safe while online.

I. BACKGROUND

### I. BACKGROUND

Since the 1990s, the Internet has gained importance and popularity as an information source, a medium for communication, and a venue for commerce and entertainment. As an electronic community, the Internet allows its citizens to travel and interact globally with virtual anonymity. This wide-reaching accessibility and anonymity create both freedoms and dangers for users. Almost anyone with minimal skills and hardware can access information provided on the Internet, as well as contribute to its content. But participating on the Internet can also put individuals at risk for exposure to negative materials as well as various forms of victimization online such as identity theft and fraud. Children who use the Internet are particularly vulnerable to victimization and improper exposures while online.

In an attempt to protect children who use the Internet, the federal government enacted several laws. Two of the primary laws include The Children's Online Privacy Protection Act (COPPA) of 1998 and the Children's Internet Protection Act (CIPA) of 2000. COPPA requires commercial online content providers to obtain verifiable parental consent before they can collect, archive, use, or resell any personal information pertaining to children such as names, addresses and phone numbers (American Library Association, 2003). CIPA requires libraries and schools receiving federal funding to adopt a policy addressing: (1) access by minors to inappropriate matter on the Internet and World Wide Web; (2) the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications; (3) unauthorized access, including so-called "hacking," and other unlawful activities by minors online; (4) unauthorized disclosure, use, and dissemination of personal information regarding minors; and (5) restricting minors' access to materials harmful to them. CIPA does not require the tracking of Internet use by minors or adults, but schools subject to CIPA are required to adopt a policy to monitor online activities of minors (Federal Communications Commission, 2003).

As a result of CIPA's requirement for all schools to restrict minors' access to materials that could be considered harmful, filtering, blocking, and monitoring software has emerged as a primary method for protecting children from inappropriate information and contacts. These types of computer programs have been developed and marketed to schools, as well as parents, as having the following capabilities: (1) block children's access to unapproved websites and unwanted contact from adults and other inappropriate individuals; (2) filter graphic descriptions or images from otherwise approved websites; (3) block children's personal information from being posted on the Internet; and (4) monitor children's online activities.

Other methods for protecting children from the dangers of the Internet include Internet safety education and specialized law enforcement programs. Internet safety education is currently being delivered through Web sites and curricula. Many public, private, and non-profit

organizations have included Internet safety guidelines for children and safety tips for families on their Web sites or have created portals for accessing a variety of child friendly material on the Internet. While efforts to provide information on Web sites to help keep children safe through portals and safety information are to be encouraged, there are currently no universal standards for establishing Internet safety guidelines for children. Internet safety education curricula focus on equipping children and youth with the knowledge and skills to navigate the Internet safely. These curricula, aimed at empowering youth with the knowledge to make appropriate choices while on the Internet, focus on introducing children to the idea that the cyber world has the same dangers as the real world, despite their feeling of relative safety (e.g. sitting in their own bedroom). They provide children with information about giving out personal information over the Internet, avoiding viruses, recognizing and avoiding Internet predators, and critically analyzing a Web site or advertisement for accuracy. The curricula also teach children about copyright laws.

Law enforcement has also responded to the growing concern about children's safety online though the development of the federal Internet Crimes Against Children (ICAC) task force program and the CyberTipline. The U.S. Department of Justice funded the ICAC task force to train state and local law enforcement agencies to develop specialized multijurisdictional, multi-agency responses to prevent, interdict, investigate, and prosecute Internet crimes against children (Internet Crimes Against Children, 2001). The National Center for Missing & Exploited Children, in partnership with federal and state partners hosts the national CyberTipline, on which anyone can report Internet sex crimes (www.cybertipline.com). The CyberTipline phone number for missing children is 1-800-THE-LOST (National Center for Missing & Exploited Children, 2003).

To date, there is limited research in the field of Internet safety (Cromwell, 1998). Existing studies focus on descriptive summaries of children's Internet use, but the research stops short of examining Internet safety education curricula and law enforcement programs in preventing child victimization. While the creation of Internet safety curricula is an important step in keeping children safe online, there is limited information about the theoretical framework behind current Internet safety curricula and the effectiveness of the curricula in keeping children safe. Internet safety education is a young field, still under development with many approaches being considered and varying opinions about the merits of each. Currently, two major international studies and one study from the U.S. examine Internet safety education approaches.

The first of the two international studies, a Canadian study conducted by Crombie and Trinneer (2003), measured the effectiveness of the "Missing Program," an interactive computer game for 6th and 7th grade students designed to help students develop their own Internet safety guidelines and adopt better attitudes toward online safety. Using a quasi-experimental design,

the evaluation assessed changes in knowledge, behavior, and attitude for 338 students in grades six through eight from eight elementary schools. The study found that while children demonstrated more knowledge about Internet safety guidelines, children's risky online behavior and attitudes did not change significantly, possibly due to the low levels of risky online behavior and unsafe attitudes at pre-test. The second study, completed by The Cyberspace Research Unit from the University of Lancashire, focused on children's knowledge of Internet safety guidelines and their application of the knowledge while interacting in chatrooms. The study included 1369 children between the ages of 9 and 16 from ten schools and concluded that children are aware of the Internet safety guidelines but do not have a clear grasp of when and how to apply the safety guidelines. This study argues that educational programs need to develop children's skills for appropriate behaviors and interaction in real-time online environments (O'Connell, Price, and Barrow, 2004).

One small study from the United States examines a curriculum called The NetSmartz Workshop developed through a public-private partnership with the United States Congress, United States Department of Justice's Office of Juvenile Justice and Delinquency Prevention, the National Center for Missing & Exploited Children (NCMEC), and Boys & Girls Clubs of America. Limited information is available regarding this evaluation; however, it is known that it was pilot tested with fifteen Boys and Girls Club participants ranging from 6 to17 years old. The program was evaluated using a pre- post-test design; however, it is unclear what methods (e.g., surveys or focus groups) were used to gather data from program participants (NetSmartz, 2005). The evaluation results indicate that across all age groups, children's knowledge and awareness about the Internet increased after exposure to the NetSmartz curriculum. Despite these findings, the evaluation summary noted that "behavior online might be a cause for concern, even after training."

Given the limited information about the effectiveness of Internet safety education in keeping children safe online, it is imperative to ensure ongoing research and evaluation of Internet safety approaches. To this end, this evaluation examines a program being implemented in thousands of schools across the United States and at U.S. military installations worldwide. This program, developed by i-SAFE America, Inc., focuses on teaching children how to navigate the Internet in a safe and productive manner. A description of the program follows.

### 1. DESCRIPTION OF THE i-SAFE PROGRAM

i-SAFE America is a non-profit foundation founded in 1988 to help children understand issues around Internet safety. The stated goal of the foundation is to provide students with the awareness and knowledge they need to recognize and avoid dangerous, destructive, or unlawful Internet behavior and use the Internet appropriately (www.isafe.org). i-SAFE promotes the idea

that the Internet is a community and, as such, requires members to act responsibly and be held accountable for their actions. It includes three components: the *education* component consists of a school-based curriculum for students in all grades (K-12); the *outreach* component utilizes abilities and resources from community and school leaders, parents, and students to increase Internet safety awareness (i-SAFE, n.d.); and the *Youth Empowerment Campaign* utilizes peer-to-peer communication to disseminate Internet safety messages.

The organization's founder had the idea for the creation of i-SAFE after seeing the increase in usage among youth to the extent that the Internet had become part of the youth lifestyle. The impetus for creating the organization came from experiences during the facilitation of public chatrooms in which people could ask legal questions of judges, lawyers, and law enforcement officers. Children consistently visited the chatrooms asking questions about their safety and illustrating a high level of vulnerability to the extent that law enforcement was concerned. The founder and law enforcement saw a need for a culture of adoption of Internet safety education and determined that the best way to reach children would be through a school curriculum. After years of gathering support and developing the foundation, the i-SAFE Safe Schools Education Initiative and Outreach Campaign was launched in 24 states during the 2002-2003 school year and expanded into all 50 states during the 2003-2004 school year (i-SAFE, n.d.). In 2002, the i-SAFE Safe Schools Education Initiative and Outreach Campaign received bi-partisan recognition and support from both the Senate and the House of Representatives. Consequently, the United States Congress funded i-SAFE America through an OJJDP earmark grant (i.e. an appropriation designated to support a particular program). In 2003, Congress increased its support of i-SAFE America to continue educating students nationwide. i-SAFE America also receives funding from the Department of Defense to implement the program in all Department of Defense Education Activity schools worldwide. Additionally, philanthropic and corporate donors provide assistance.

The next section of this report describes the i-SAFE program in detail. All information presented here was extracted from interviews with i-SAFE staff, the i-SAFE Web site (www.isafe.org), and published curriculum and professional development program materials.

#### 1.1 Curriculum Development

The i-SAFE curriculum is continuously being revised to reflect current trends in the fields of technology and education. Originally, the i-SAFE curriculum was developed to educate students in grades five through eight, using five core lessons considered to be most appropriate for the age group: (1) living as a Net citizen in the cyber community; (2) personal safety as a cyber citizen in the 21<sup>st</sup> century; (3) technology and the computer virus; (4) plagiarism and the theft of intellectual property; and (5) law enforcement and Internet safety. The original

curriculum was taught using PowerPoint presentations in a lecture format. All four grades received the same five lessons, which were designed so that a classroom teacher could teach all of the lessons; however, it was recommended that members of the police or sheriff's department teach the fifth lesson focused on law enforcement.

Within the last few years, i-SAFE has added to its core curricula, developing three new core lessons for students in kindergarten through grade 4 (K-4), as well as Web casts for high school students. The new K-4 curriculum uses a character named I-buddy, age appropriate games, and other activities to help students learn about safety issues and communication in the physical (i.e. in-person) versus the cyber (i.e. online) community. High school Webcasts allow students in grades nine through twelve to learn how to stay safe on the Internet while enabling them to discuss and debate Internet privacy issues such as releasing personal information, identity theft, and cyber relationships with other students. While i-SAFE has expanded to reach students in grades K-12, this evaluation is focused on the fifth through eighth grade curriculum

**Revisions to the curriculum**. The fifth through eighth grade curriculum was revised for new release during the 2003-2004 school year (the revised version). The five core lessons in the revised curriculum are similar to the earlier core lessons, although the information and activities differ by grade. The lessons include: Community, Cyber Security, Personal Safety, Predator Identification, and Intellectual Property. The curriculum was expanded to include multimedia activities and youth empowerment activities consistent with Bruner's constructive learning theory, which says learning is an active process in which students construct new ideas or concepts based upon their current/past knowledge. The student selects and transforms information, constructs hypotheses, and makes decisions, allowing the individual to "go beyond the information given" (Bruner, n.d.). While this theory does not address Internet safety in particular, the theory fit with the program developers' intent to have the students construct their own opinions through thinking about their own online behavior and talking with each other. The curriculum provides them with information about potential hazards on the Internet, approaches for safely dealing with those hazards, and activities to help them think about the knowledge received and shared with their peers. The revised curriculum and expansion of activities give teachers more flexibility and freedom to customize the lessons for specific classes by, for example, opting to spend more time on some lessons than others.

The revised version of the curriculum is more interactive than the earlier versions, and includes lessons that are more tailored to each grade level, and encourage critical thinking, active problem solving, peer-to-peer involvement and youth empowerment activities. Developers made an effort to limit the non-interactive portion of the curriculum through eliminating all PowerPoint presentations except for the fourth lesson, which focuses on predator identification.

Law enforcement officers, including School Resource Officers (SROs) often teach this lesson, and the PowerPoint presentation assists in guiding the officer or teacher through the lesson.

Each lesson includes a menu of possible classroom activities to be implemented during the 60-minute lesson and youth empowerment activities to be implemented outside of the 60minute lesson. Classroom activities include components that may be completed with or without computers, giving teachers the flexibility to choose which lessons will be implemented using the computer and which will not. Thus, the curriculum is flexible, depending on resources available in each classroom and teachers' preferences. In addition to classroom activities, a primary component of the i-SAFE program is the youth empowerment activities. Classes have the option of doing one large empowerment activity for the entire i-SAFE curriculum (e.g. cybersafety week), or doing separate activities for each of the five lessons. Examples of youth empowerment activities may include presentations at faculty meetings or school assemblies, distributing fliers, creating brochures, displaying posters, writing newspaper articles, going to classrooms and speaking with students, and inviting guest speakers to the school. The empowerment activities are meant to take what was learned in each lesson and extend it a step further.

**Description of 2004-2005 curriculum**. i-SAFE America is committed to keeping abreast of changes in technology, law, and youth trends and updating the curriculum as appropriate. As such, in 2004-2005, the curriculum was revised again, based on teacher feedback. This version of the curriculum includes the same five core lessons described in the revised curriculum (also see Appendix 13 for more detail), with slight changes in wording, order and activities. The main difference between the revised and 2004-2005 versions is the inclusion of optional PowerPoint presentations for each of the five core middle school lessons. These optional PowerPoint presentations were updated to include pauses for class discussion and activities and are intended to help guide the lesson. In addition, the program now also includes several supplemental lessons for fifth through eighth grade on cyber-bullying, literacy, and homeland security that are available online for interested schools. Finally, i-SAFE began publishing a regular newsletter that is available on its Web site to help keep teachers up-to-date on Internet safety.

### 1.2 i-SAFE program dissemination

At this time, the i-SAFE curriculum has been disseminated in all 50 states, although the method of dissemination differs depending upon the structure of the educational system within each state. While expanding throughout the states, i-SAFE representatives would conduct a needs assessment of each state by gathering information on crime, demographics, and the student population. i-SAFE would then develop a strategy for expansion into the state by identifying the key decision makers and geographic locations in the state who would be able to support

expansion. i-SAFE representatives would then develop relationships with key state-level players such as those at the Department of Education, Centers for School Safety, state offices of Safe and Drug Free Schools (SDFS), and local school districts. Through these relationships, i-SAFE would gain the interest of stakeholders in education, who were then able to support adoption of the curriculum, promote train-the-trainer events, and facilitate the approval processes within each district. This model varies from state to state with high-level involvement the norm; however, word of mouth and local interest in the curriculum also contribute to expansion. Once expansion into a state occurs, regional i-SAFE staff members keep in contact with interested parties at the state and local level, keep track of the status of program implementation in the schools, ensure all instructors have received the i-SAFE professional development training, and give assistance as needed.

i-SAFE America uses a train-the-trainer model for its Professional Development Program (PDP), the primary method of instruction for training individuals to administer the curriculum. Regional i-SAFE staff members conduct one-day PDPs within a state or large geographic region and focus on introducing the program to prospective i-SAFE teachers, principals, and district level administrators. The PDP includes an illustration of the key components of the program, encouragement of community outreach, and provision of background information on Internet safety. The basic premise behind the PDP is that each participant will go back to his or her own region or school district and train others to implement the curriculum. Once an individual has attended a PDP, he or she is eligible to conduct PDPs and to implement the curriculum. In Nebraska, for example, each regional Educational Service Unit (the units responsible for providing training and technical assistance to school districts in specific geographic regions) sent a Technology Coordinator to state-level PDPs. The Technology Coordinators were then responsible for going back to their ESU and training the teachers (or staff) there. The Nebraska method has been used to disseminate the program throughout the state, and is currently being implemented in many other states through administrative offices similar to the ESUs (such as large county-wide school districts).

Once a district or school has a trained an instructor, he or she is responsible for sending a cooperative agreement (developed by i-SAFE America) to i-SAFE America outlining the school's (or district's) commitment to execute the i-SAFE program. A detailed implementation plan must also be submitted at least three weeks prior to any implementation of the curriculum to students. After the implementation plan is on file at i-SAFE America, instructors are then eligible to obtain the curriculum and implement the program.

### 1.3 i-SAFE America Program Assessment Efforts

i-SAFE America conducts ongoing program assessments through the national office. The results of the assessment data are given to the US Department of Justice, with the purpose of providing a summary of children's Internet knowledge and experiences and to improve the program curriculum.

In the first few years of the program, the assessment process consisted of having students anonymously complete short pre- and post-test assessments for each of the five lessons. The purpose of the assessments was to measure youths' attitudes about and behaviors on the Internet. The assessments were completed either online or using paper-and-pencil forms, which were later scanned for analysis.

In July 2004, i-SAFE America announced plans to change the assessment process starting with the 2004 2005 school year. Instead of completing pre and post assessments for each lesson, students now are required to take a pre-assessment prior to the beginning of the curriculum, a post-assessment following the conclusion of the curriculum, and a delayed assessment three to six weeks after completing the curriculum. Additionally, to eliminate the costs associated with the completion and mailing of paper-and-pencil forms, assessments are taken online through the i-SAFE Web site.

In an effort to provide a resource for others to learn about children's Internet behavior at a national level, i-SAFE America is developing a national database on Internet behavior that, in addition to other sources of information, will include the data from the assessments. The data serves the purpose of monitoring and assessing children's knowledge and behavior, prior to and after receiving the i-SAFE curriculum.

### 2. INTRODUCTION TO THE i-SAFE EVALUATION

In the last decade, with increasing access to the Internet, and the growing number of American households with home computers, interest in Internet safety, particularly for youth, has grown among researchers and practitioners, alike. In addition, because Internet safety education is a new area of interest, it is unclear how effective it is in keeping children safe on the Internet.

As a leader in innovative and cutting-edge research and evaluation, in 2001, NIJ awarded Caliber Associates a contract to conduct a quasi-experimental study of the effectiveness of the i-SAFE curriculum in teaching children about Internet safety. Specifically, NIJ was interested in answering the following three questions:

- Do students retain the knowledge received during i-SAFE lessons?
- Do they use this knowledge?
- At what reduced levels or intensities of implementation are program benefits no longer measurable?

As the first rigorous study of Internet safety education (most other studies did not include a comparison or control group), this evaluation was intended to begin to build the knowledge base about "what works" in Internet safety education. In addition, because of its design, it also was intended to serve as a model for future studies of Internet safety. Finally, the challenges of implementing research studies in educational settings are well-known. Over the years, the educational system has taken on greater responsibility for the students it serves. The school is simply no longer a place where children come to learn: schools now serve the psychological, physical, emotional, and social needs of both the students and their families. In addition, with the introduction of the "No Child Left Behind Act" in 2001, school districts have cut out extracurricular and other activities to focus more time on preparing students to perform well on standardized tests. Conducting research in educational settings, then, has become increasingly difficult. Not only is research not a priority for school administrators but also in many schools, the school day has been extended just to accommodate core courses. To use school time for research is simply not an option for most schools. As a result, this study also was an exercise in gaining entry into the schools and getting district officials (and teachers) to commit to a study with not just one but multiple data collection points.

The remainder of this report presents the evaluation in detail. The next chapter presents the methodology used in the study, including the methods by which students and schools were recruited for participation. Chapter 3 presents the findings from the process evaluation, including important information about implementation characteristics. Chapter 4 presents the findings from the outcome study. Finally, Chapter 5 provides a discussion of the findings within both a theoretical and practical framework.

**II. METHODOLOGY** 

## II. METHODOLOGY

The national evaluation of the i-SAFE program is a quasi-experimental, longitudinal study designed to investigate the effectiveness of the i-SAFE curriculum to instill knowledge in middle school students that will assist them to recognize and respond to dangerous or inappropriate online situations. The evaluation has two key components: a process evaluation that includes a cost component, and an outcome evaluation. This section describes the study methodology, including the evaluation questions, research design, site selection, and data collection methods and measures.

### 1. EVALUATION QUESTIONS

For each component of the evaluation a set of research questions was developed to guide the research and ensure that the information collected would meet the needs of both NIJ and the field. Each set of questions is discussed in detail below.

#### 1.1 Process Evaluation

The process evaluation is intended to assess how the program is implemented at each site. The findings from the process evaluation add depth and meaning to the outcome evaluation findings, inform program replicability potential, and provide a context for interpretation of childlevel knowledge and behavior outcomes. Findings will be used to inform how the program is implemented in the field, including the strengths and challenges associated with implementing the program. The process evaluation questions include:

- How was the i-SAFE program implemented?
- Was the i-SAFE program implemented with fidelity?
- How is the program perceived in the field?

### 1.2 Cost Assessment

As part of the process evaluation, a cost component is intended to assess the cost of the i-SAFE curriculum. As this is the first study documenting the cost of implementing Internet safety curricula, the cost assessment is intended to serve as a foundation for future cost-benefit and cost-effectiveness research on Internet safety education. The cost assessment includes the following questions:

- What is the cost of the i-SAFE program?
- What is the cost of installing and maintaining blocking and filtering software for all the computers in each school in the district?
- On average, how many hours per month do school staff spend dealing with incidents of inappropriate Internet use? What is the approximate cost per hour?

### **1.3** Outcome Evaluation

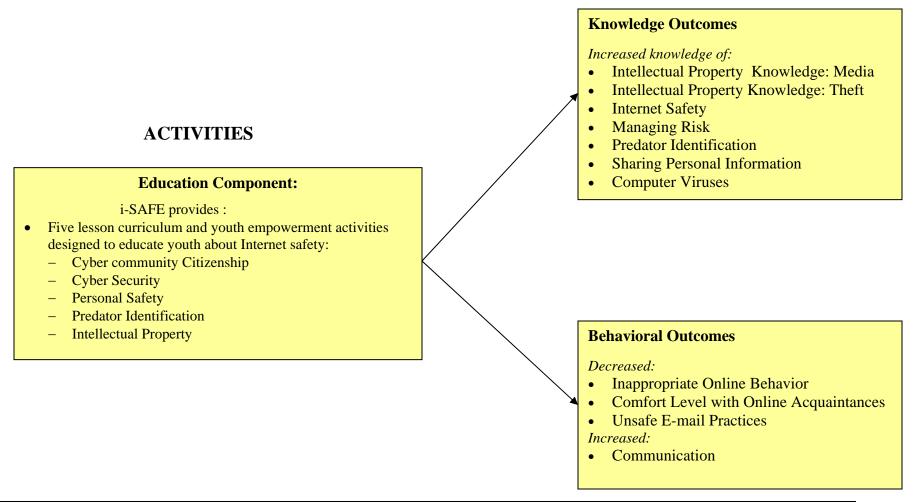
The outcome evaluation is intended to measure the extent to which students retain and use the knowledge gained from their participation in the i-SAFE program. The outcome evaluation questions include:

- Do students retain the knowledge received during i-SAFE lessons?
- Do they use this knowledge?
- At what reduced levels or intensities of implementation are program benefits no longer measurable?

A logic model, developed at the start of the evaluation, links the research questions to short-term outcomes (See Exhibit II-1).

# **EXHIBIT II-1: LOGIC MODEL FOR I-SAFE PROGRAM**

### SHORT-TERM OUTCOMES



### 2. EVALUATION RESEARCH DESIGN

A quasi-experimental design was used to measure the effectiveness of the i-SAFE curriculum. This research design consisted of comparing over a nine-month period a group of students who receive the curriculum (treatment group) and students who do not (comparison group).

Of the 8 sites that were recruited to participate in the study, the design was implemented in six sites.<sup>1</sup> A site refers to a school district, a school, or a grade. Within each site, a treatment school or grade was paired with a comparison school or grade based on the following characteristics: race, gender, and a measure of socioeconomic level (percentage of reduced and free lunch).<sup>2</sup> There were a total of 20 schools participating in the study. Of the 20 schools, 14 schools were treatment schools and 6 schools were comparison. Two of the 14 schools did not have a comparison school, so they were excluded from the outcome evaluation. Of the 12 remaining treatment schools, 10 schools served exclusively as treatment schools and 2 schools served as both treatment and comparison. The design was unbalanced, that is, there were more treatment schools than comparison schools. Exhibit II-2 describes the implementation of the research design.

EXHIBIT II-2. IVII LEWENTATION OF RESEARCH DESIGN			
Type and Description	Treatment Groups	Comparison Groups	Total # of
of Site	-		Schools
Site 1: School District	2 middle schools (6, 7, 8 grades)	1 middle school (6, 7, 8 grades)	6 schools
Schools from Daviess	2 elementary schools (5 <sup>th</sup>	1 elementary school (5 <sup>th</sup> grade)	
County, KY.	grade)		
Treatment schools			
were paired with			
comparison schools			
within the same			
district.			
Site 2: School District	2 middle schools (6, 7, 8 grades)	1 middle school (6, 7, 8 grades)	6 schools
Schools from Fayette	2 elementary school (5 <sup>th</sup>	1 elementary school (5 <sup>th</sup> grade)	
County, KY.	grade)		
Treatment schools	-		
were paired with			
comparison schools			
within the same			
district.			

**EXHIBIT II-2: IMPLEMENTATION OF RESEARCH DESIGN** 

<sup>&</sup>lt;sup>1</sup> Of the eight sites, two did not have comparison groups, and so were excluded from the outcome analysis.

<sup>&</sup>lt;sup>2</sup> Appendix 1 contains the school level demographic characteristics that were used to pair the schools.

Type and Description of Site	Treatment Groups	Comparison Groups	Total # of Schools
Site 3: School A treatment school from St. Paul, NE school district was paired with Centura, NE school district.	1 school (5, 6, 7 grades)	1 school (5, 6, 7 grades)	2 schools
In the Lexington, NE school, grades were divided into treatment and comparison.	Several classrooms from 6, 7, and 8 grade served as treatment	Several classrooms from 6, 7, and 8 grade served as comparison	1 school
Site 5: School A treatment school from Edmond, OK school district was paired with a school from Norman, Ok school district	1 school (grades 6 and 8)	1 school <sup>3</sup> (grade 6 and 8)	2 schools
Site 6: Grade A grade from one school in Norman OK school district was paired with a grade from another school in the same district	1 school <sup>3</sup> – grade 7	1 school – grade 7 is comparison	1 schools

### 3. SITE SELECTION

There were three steps in the site selection process, which were planned and modified as necessary in consultation with NIJ, OJJDP, and i-SAFE America. The selection and recruitment of sites proved to be an arduous process. Many of the sites identified initially had implemented or were implementing the curriculum at the time of contact and so were ineligible for participation. The other issue that complicated the selection process was the quick turn around between the time a school showed initial interest in the program and program implementation. In many cases, this time frame was only a matter of weeks, making it difficult for the evaluation team to make contact with a school before it began implementing the curriculum. As indicated

<sup>&</sup>lt;sup>3</sup> The comparison school in site 5 and the treatment school in site 6 are the same.

in Exhibit II-2 above, the final six sites selected for the evaluation included two in Kentucky, two in Oklahoma, and two in Nebraska.

### 3.1 Kick-off Meeting with i-SAFE, NIJ, OJJDP and the Caliber Research Team

In December 2003, a kick-off meeting was held at the i-SAFE America Foundation headquarters in San Diego, CA. The meeting was used to finalize the school selection criteria, which were developed initially for the i-SAFE evaluability assessment, which was conducted by Caliber for NIJ in 2002. The process by which schools would be identified, contacted, and recruited also was discussed during this meeting.

After discussion and review, there were four final selection criteria:

- Both treatment and comparison schools with socioeconomically and demographically equivalent populations
- At least 3 of the 4 targeted grades (grades 5-8)
- For both the treatment and comparison groups, students that had not previously received the curriculum
- Sufficient sample sizes to meet the power requirements for the analysis.

### 3.2 Approach to School Recruitment

In January 2004, i-SAFE provided a list of schools that had attended a recent PDP training and submitted an implementation plan to i-SAFE. The list included such school information as student demographics (e.g., number and level [elementary/middle] of the schools in the district, the number of students per grade) and a contact person. Twenty-three of the schools on the list met the selection criteria; however, these schools were either implementing the curriculum already or had plans to do so. As such, they were ineligible to participate.

To locate schools that would be implementing the curriculum for the first time in fall 2004, Caliber requested future implementation and PDP schedules from the i-SAFE America Foundation. From this list, Caliber selected 29 potential schools. i-SAFE America staff members then contacted each of the potential schools to provide information about the evaluation and inform them that Caliber would be contacting them.

Once contacted, it was determined that these 29 schools were already implementing the curriculum or planning to implement within the next couple of weeks, making them ineligible for

participation. A conference call was then held with i-SAFE program staff and the Caliber research team to determine other possible strategies for site selection. A new strategy was agreed upon and included the following steps:

- Using online sign up forms—Online sign-up forms for the PDP sessions would be altered to include a section for teachers to initial if they agreed to allow i-SAFE to provide their contact information to Caliber.
- Providing information to future PDP participants—Participants registered for March and April 2004 PDP sessions would be given information regarding the evaluation.
- Accessing PDP participants' contact information—Within one week of conducting a PDP session, i-SAFE would send contact information to Caliber for teachers who gave their approval to be contacted. These teachers then were contacted by Caliber regarding the evaluation.

However, the strategy described above was not implemented. In April 2004, i-SAFE agreed to introduce the evaluation to representatives in five state Departments of Education with whom they had contacts. Caliber then contacted each of the states in an effort to recruit schools for the evaluation. This approach proved successful with two sites recruited from Kentucky. Through earlier contacts in the site selection process and referral, Caliber recruited five schools in Nebraska (in three school districts), and three schools from Oklahoma (in two school districts).

### 3.3 Site Descriptions

The final six sites included 12 treatment schools, six comparison schools and two schools that had both treatment and comparison students. Each school signed agreement forms to participate in the evaluation and received incentives for participation. Assignment to treatment or comparison status was done in collaboration with the school principal with consideration of the principal/teacher's interest in teaching the curriculum during the 2004/2005 school year (some schools wanted to wait and see the outcome of the evaluation), school resources to teach the curriculum, and balance of treatment/comparison schools within a school district (e.g. Kentucky districts) or site. Schools received the same incentives regardless of their treatment or comparison status and demographics. The sites selected to participate in the national evaluation, while not representative of the population nationwide, are representative of the types of places (i.e., smaller towns) that were implementing the i-SAFE curriculum at the time of the site selection process, as described by i-SAFE America, Inc. representatives. Using data from the 2000 Census, the section below presents a short description of each site.

**Daviess County, Kentucky (Site 1).** The Daviess County Public School district is located in the Western Coal Field Region of Kentucky, on the southern border of Indiana. Owensboro is the major city in the 462 square mile county. According to the 2000 census, Daviess County population is 91,545, with 26 percent under the age of 18. The majority of the county population is White (94 percent) and female (52 percent); slightly more than 12 percent of residents live below the poverty level.

The school district consists of 12 elementary, three middle, and two high schools with a combined enrollment of slightly more than 10,000 students. Six Daviess County schools participated in the i-SAFE evaluation. The treatment schools were Burns Middle School, Daviess County Middle School, Whitesville Elementary School, and Utica Elementary School. The two comparison schools were College View Middle School and West Louisville Elementary School.

**Fayette County Kentucky (Site 2).** Fayette County, Kentucky is located in the Inner Bluegrass region of the state. In 2000, the county population was 260,512 in a land area of about 284 square miles. Half of the Fayette County population is female, with 21 percent under the age of 18. The majority of the population is White (81 percent), and African Americans are the largest minority group (14 percent). Approximately 13 percent of residents live below the poverty level.

The Fayette County Public School district consists of 53 schools, including 34 elementary, 11 middle, and five high schools. These schools serve approximately 33,000 students. In addition to these schools, the district also includes two centers for applied technology and one alternative school. Six schools from the Fayette County Public School system participated in the i-SAFE evaluation. The treatment schools were Edythe Hayes Middle School, Winburn Middle School, Northern Elementary School, and J.R. Ewan Elementary School. The two comparison schools were Crawford Middle School and Linlee Elementary School.

**St. Paul and Centura, Nebraska (Site 3).** St. Paul and Centura are located in Howard County, which covers 569 square miles and has a population of 6,567, with 28 percent under the age of 18. Half of the population is female, and most (99 percent) of the population is White. Approximately 12 percent of residents live below the poverty level.

The Centura School District is a rural consolidated district, which includes one school (K-12) that serves 600 students, located in the southwest corner of Howard County. Centura

students come from the small towns surrounding the school. Students in grades five through eight participated in the evaluation as part of the comparison group.

The St. Paul school district is located in Howard County. Like Centura, it includes one school that serves 652 students (K-12). St. Paul students come from the city of St. Paul, population 2218, and surrounding farms. Students in grades five through seven participated in the evaluation as part of the treatment group.

Lexington, Nebraska (Site 4). Lexington Middle School is located in Lexington, Nebraska, the county seat of Dawson County. The county covers 1,013 square miles and has a population of 24,365, and Lexington has a population of 10,011. Approximately a third (29 percent) of the population of Dawson County is under the age of 18. Half of the population is female and 82 percent is White. In 2000, 11 percent of Dawson County residents were living below the poverty level. Lexington City is more diverse than the county overall, with a population that is 65 percent White and 31 percent Hispanic.

The Lexington Public School District serves an area of approximately 38 square miles and 2700 students from preschool through grade 12. Lexington has four elementary schools, a middle school, and one high school. Due to the large number of Hispanic students and the lack of equivalent comparison schools, the middle school provided both treatment and comparison students.

**Edmond County and Norman, Oklahoma (Site 5).** Two schools from two Oklahoma school districts (the Norman and Edmonton Districts) participated in the evaluation. From the Norman District, Longfellow Middle School provided sixth and eighth grade students for the evaluation. They served as comparison students. The Norman District is located 17 miles south of Oklahoma City in Cleveland County. Cleveland County covers 536 square miles with a population of 208,016. Half of the residents are female, 24 percent are under the age of 18, and 84 percent are White. Approximately 10 percent of residents live below the poverty level. Norman has the tenth largest student population in the state with 12,596 students. The school district's boundaries cover 161 square miles in Cleveland and McClain counties. The district includes 16 elementary schools, four middle schools and two high schools.

From the Edmond District, Summit Middle School provided sixth and eighth grade students for the evaluation. They served as part of the treatment group. Edmond Public Schools are located in Oklahoma County just north of Oklahoma City. According to the 2000 census, the population of Oklahoma County is 660,448. Slightly over half of the residents are female; 26 percent are under the age of 18; and 70 percent are White, 15 percent are African American, and 9 percent are Hispanic. Approximately 15 percent of residents live below the poverty level.

Edmond Public Schools is the fifth largest public school district in Oklahoma, with 13 elementary, five middle, and three high schools. The district serves more than 17,000 students.

**Norman, Oklahoma (Site 6).** Also from the Norman District, Irving Middle School served as the comparison group for seventh grade treatment students from Longfellow Middle School.

### 4. METHODS AND MEASURES

The data collection effort for the evaluation included both on- and off-site data collection activities that, when combined, informed both the process and outcome components of the evaluation. Data collection started in September 2004 and ended in June of 2005, spanning the 2004 – 2005 school year. On-site data collection activities included two site visits to each school to recruit students, obtain parental consent and student assent for students participating in the evaluation (see Appendix 2), and conduct interviews and focus groups with teachers, law enforcement officers, principals, and students. Off-site data collection activities included document review, teacher-completed fidelity checklists, telephone interviews with i-SAFE staff, and the online student survey. Each of these methods is described below.

### 4.1 Interviews

The research team visited each participating school before and several months after program implementation. The first visits were conducted in the fall of 2004, while the second visits took place in the spring of 2005. During the first site visit, Caliber staff trained all teachers in how to complete evaluation forms, collect consent and assent forms from students, and administer the online student survey. During this visit, the team also explained the evaluation to potential student participants, and gained parental consent and student assent from those students who were able to provide this information while the team was on-site (teachers gathered this information from those students who could not provide it while the team was still on-site). The team also interviewed school principals.

During the second site visit, the research team conducted individual interviews with teachers implementing the curriculum, school principals, and district level technology coordinators. They also conducted focus groups with students. In addition to on-site interviews, Caliber conducted interviews with i-SAFE America, Inc. personnel by telephone in January 2004. This section describes the interview methods for these groups. Because of the small numbers of interviewees in each group (i.e., teachers, principals, and technology coordinators), demographic information is not reported for them. This step was taken to ensure the confidentiality of the interviewees.

**Teacher Interviews.** Interviews with teachers were a key source of information about several implementation issues, including how the curriculum was being implemented in each school; the methods by which Internet safety is typically taught in schools that do not use the i-SAFE curriculum; the strengths and challenges associated with the curriculum, in general, and implementation of it; and teachers' recommendations regarding changes or modifications to the curriculum. Interviews were conducted with both those teachers implementing the curriculum and those individuals who either helped bring the curriculum to the school or were involved with completing and submitting evaluation instruments for the comparison schools (i.e., computer technology teachers, media specialists, or counselors). With some variation between treatment and comparison schools, interviews covered these topics:

- The manner by which i-SAFE was introduced to the school
- The working relationship between each school and i-SAFE America
- Other formal or informal Internet safety education taught in schools
- Each school's Internet acceptable use policies
- Strengths and challenges to implementing the i-SAFE program
- Essential components of the i-SAFE curriculum
- i-SAFE training and technical assistance activities
- Future plans to implement the i-SAFE program.

**Principal Interviews.** Interviews with school principals were conducted during both the first and second site visits. There were fifteen principals interviewed from treatment schools, and seven from comparison schools. The first site visit interviews were used to explain the evaluation and discuss several important topics, including school Internet/computer acceptable use policies; previous school year incidents of inappropriate Internet use; local community support to teach the i-SAFE curriculum; the school's history of working with i-SAFE; and other types of formal or informal methods being used to teach students about Internet safety. The purpose of the second round of interviews was to cover topics related to i-SAFE implementation. Several other topics also were covered, including current school year incidents of inappropriate Internet use; policies and cost for dealing with inappropriate incidents of Internet use; strengths and challenges faced in implementing the i-SAFE curriculum; and plans to implement the i-SAFE curriculum in the future.

**District Level Personnel Interviews.** Interviews were conducted with 11 staff members at the district or regional level. The primary purpose for conducting these interviews was to collect information on district level policies related to appropriate and inappropriate use of the Internet, including those designed to address incidents of inappropriate use, and blocking and filtering software, specifically. These individuals also were asked to talk about the working relationship between the district (or region) and i-SAFE America, Inc.

**i-SAFE America Personnel Interviews.** Interviews with six i-SAFE America, Inc. personnel and one i-SAFE consultant were conducted in January 2004 by telephone. The purpose of the interviews was to develop an understanding of the organization, the history of the curriculum; program assessment, delivery, and expansion efforts; program funding; and future plans for the organization and the curriculum.

#### 4.2 Student Focus Groups

Sixty focus groups were conducted with a stratified random sample of 457 evaluation participants in the spring of 2005, 36 with treatment group participants and 24 with comparison group participants. The purpose of the focus groups was to give context to the survey results by gathering in-depth information about four topics: (1) students' ability to freely recall information presented in the i-SAFE curriculum; (2) students' experiences on the Internet, including exposure to inappropriate material and requests for personal information; (3) students' behavior on the Internet; and (4) students' perception of the i-SAFE program. A description of the selection process and demographics for the participants follows.

**Selection Process**. Focus group participants were selected from a stratified random sample of all participants with parental consent and student assent who completed administration 2 (post-test) of the online survey. The stratification was based upon grade, sex, and treatment/comparison status, as well as the number of participants per grade within a school. Focus groups for seventh and eighth grade students were held separately for boys and girls because of the sensitive nature of the topics discussed and a desire to make students feel as comfortable as possible. A list of alternates also was prepared in the event that selected participants were absent on the day of the focus group.

After participants were selected, school representatives were notified regarding the number of focus groups to be conducted at their school. A list of selected and alternate participants also was sent to each school's principals and primary contact persons. The principals and contact persons from each school were responsible for the logistics related to the focus groups. These included reserving a private space where the groups could take place; notifying teachers of the day and time of focus groups so they could minimize class disruption as students left the classroom to attend the group; and having a plan for how to identify absent participants and substitute alternates quickly and efficiently. During each group, only participants and Caliber facilitators were permitted in the room.

**Sample Description.** Focus group participants ranged in age from ten to 14; however, most participants were either twelve (22%) or thirteen (35%) years of age. The sample was evenly split between boys and girls. The majority of the participants were Caucasian (67%) with

Hispanic (15%) and African-American (10%) students comprising the largest minority groups. Other ethnicities made up only 8 percent of the entire sample (i.e., Native American or Alaskan Native, Asian American or Pacific Islander, mixed descent, and other). Those who indicated an "other" ethnicity generally specified a mixed descent. Exhibit II-3 provides additional detail regarding the focus group sample, including the distribution by grade between the comparison and treatment groups.

EXHIBIT II-3: DISTRIBUTION OF FOCUS GROUP SAMPLE BY GRADE, SEX, AND
TREATMENT/COMPARISON STATUS

Grade	Number of Treatment Focus Groups	Number of Comparison Focus Groups	Total groups (% of focus group participants
5 <sup>th</sup> grade	7 mixed* groups	3 mixed groups	10 groups (13%)
6 <sup>th</sup> grade	8 mixed groups	5 mixed groups	13 groups (23%)
7 <sup>th</sup> grade	3 girl groups & 4 boy groups	3 girl groups & 3 boy groups	13 groups (23%)
8 <sup>th</sup> grade	7 girl groups & 7 boy groups	5 girl groups & 5 boy groups	24 groups (41%)
Total	36 groups	24 groups	60 groups
* "Mixed" refers to groups with both male and female participants.			

### 4.3 Document Review

Throughout the evaluation, documents provided by i-SAFE America served as an important source of information. The following i-SAFE America documents were reviewed and analyzed for this study:

- Initial and subsequent grant applications
- Quarterly and annual categorical assistance progress reports (CAPR)
- Annual budgets and expenditures
- Protocols for program planning and implementation (e.g., number of hours required for training, guidelines for program delivery, cost data, and modality of instruction)
- The i-SAFE curriculum
- Professional development program materials.

Demographic information for schools implementing or intending to implement the curriculum also was made available for review. Finally, Internet use policies were reviewed for treatment and comparison schools. More detailed information can be found on Internet use policies in the treatment and comparison schools in Appendix 3.

# 4.4 Program Fidelity Checklist

To monitor fidelity of program implementation, five lesson-specific fidelity checklists for each grade were developed to capture the extent to which activities listed in the curriculum were implemented as intended (see Appendix 4 for a copy of the checklist). Each individual who taught any part of the curriculum (e.g., teacher, law enforcement officer) was asked to complete the appropriate fidelity checklist each time they taught an i-SAFE lesson. For example, if a teacher taught lesson 1 to a class of sixth grade students, and two classes of seventh grade students, the teacher would complete a sixth grade lesson 1 fidelity checklist, and a seventh grade lesson 1 fidelity checklist for each of the two seventh grade classes. The checklists were developed to help understand how the program was implemented in each of the schools, including any issues specific to the school itself that either facilitated or impeded successful implementation.

Although they were developed for different lessons and had some variation, the five fidelity checklists were structured around the following sections: time spent preparing the lesson, the length of the lesson, the level of engagement of the students during the lesson, challenges encountered and strategies used to overcome them, activities to be implemented during the lesson, and the type of youth empowerment activities implemented.

### 4.5 Student Online Survey

An online student self-report survey was the primary method used to measure student knowledge and behavior outcomes (the survey can be found in Appendix 5). The survey was administered six times throughout the 2004 - 2005 school year, including before and after curriculum implementation, before winter break, after winter break, partway through the spring semester, and just before the end of the school year. The survey took approximately forty minutes to complete. Questions were closely tied to the learning objectives of the curriculum and included demographics, background information about computer experience, and questions about such topics as virus protection, personal information on the Internet, Internet predators, intellectual property law, Internet risk management, and appropriate/inappropriate online behavior. Different survey questions were grouped together to create scales. Factor analyses were conducted to be sure that questions that were grouped together actually fit together

statistically. They also were tested for reliability (see Appendix 6 for a list of scales and Appendix 7 for a list of items by scale).

Given the subject matter involved, the minor status of participants, and the need for students to answer questions truthfully, student confidentiality was extremely important. Prior to each survey administration, Caliber staff mailed to the designated teacher a package containing sealed envelopes for each student participating in the study. For the first administration of the survey, each student received a letter in the sealed envelope that contained a login code and instructions on how to fill out the survey. For subsequent administrations of the survey, each student received an index card, enclosed in a sealed envelope, that listed the student's unique randomly generated login code, the survey administration number, and a confidential student ID number generated by Caliber. In order to protect student confidentiality, the login code was

<b>EXHIBIT II-4 : STUDENT CHARACTERISTICS</b>		
Student Characteristic	Treatment (n= 1328)	Comparison (n= 771)
Sex		
Male	632	321
Female	696	450
Race		
White	864	524
Black	196	70
Latino	96	65
Other	172	112

automatically deactivated once the child completed the survey. By deactivating the password upon completion, it was not possible for anyone to access the student's responses after completion (e.g., teacher, parent, administrator, or other student). The final sample consisted of 2,099 students. The overall participation rate was 67 percent of students who received consent forms when the outlier schools were included, and 73 percent excluding the outliers<sup>4</sup>. A description of the sample is in Exhibit II-4. A detailed description by site is in Appendix 8.

# 5. ANALYSIS

The data for this study were analyzed using qualitative and quantitative methods, as described below. With the exception of the fidelity checklists, the process evaluation data were analyzed using qualitative methods, which is appropriate given most of the data came from interviews and focus groups. The fidelity checklists were analyzed using both qualitative and quantitative methods. The outcome evaluation data were analyzed using Hierarchical Linear

<sup>&</sup>lt;sup>4</sup> There were a few schools in which a large number of consent forms were never returned. Because this was inconsistent with our experience at all of the other schools, these schools were treated as outliers and consent rates were calculated both including and excluding these schools.

Modeling (HLM). HLM was chosen because it allows the user to address one of the key challenges in education research: the fact that students exist within multiple and hierarchical structures. In statistics, this hierarchy of structures is referred to as nesting. In this evaluation, time (the data from the six surveys) is nested within students, and students are nested within classrooms. This is important because people within any organizational structure, such as a school or a grade level, tend to be more similar to one another than people selected at random from the entire population (Osborne, 2000). For example, fifth grade students in a given school in Kentucky are more similar to one another than a sample of fifth graders drawn randomly from the entire country because they all come from the same geographic area. As a result, they are likely to be more homogeneous in terms of race, socio-economic status, and family background, than the general population. In addition, children in the same classroom share the same teacher and teaching environment. Moreover, when data are gathered from the same individual at multiple points over time, as is the case here, nesting also becomes a problem. HLM allows the analyst to deal with these many layers (or levels of shared characteristics) between and within students.

### 5.1 Qualitative Analysis

All qualitative data (i.e. interview and focus group data) were analyzed using content analysis and thematic coding. In content analysis, first interview and focus group transcripts (or notes) are organized by question and respondent group. Then, a sample of the organized data is searched for "chunks" (e.g., sentences and paragraphs) of interest. These chunks are then coded and organized by code or theme (i.e., the word or description that best represents the content of the chunk). Once an initial group of codes is established, they are applied to the rest of the data. During the coding process, the analysts apply the initial set of codes to the data, but, at the same time, also look for new codes or ways to modify the existing set of codes. During this process, the analysts also implement inter-rater reliability techniques to ensure that the data are being coded consistently across analysts. The coding process (and development of the codes) continues until the analysts feel the data have been thoroughly analyzed and feel confident that any data of interest have been identified and coded.

### 5.2 Quantitative Analysis

To assess the extent to which the curriculum produced intended changes in children's knowledge of Internet safety and their behavior online, a three-level hierarchical linear model was developed using HLM Version 6.02 (Raudenbush, Bryk, Cheong, and Congdon, 2004). In this analysis, the three levels were:

• Level 1: time (i.e., measurement wave). This level accounts for the time point at which the data were gathered. Recall that there were six data administration time

points in this study or six measurement waves. One advantage of the HLM approach is that it can accommodate data that are missing at any given time point.

- Level 2: student characteristics. This level accounts for characteristics of the student participants (i.e., age, sex, race/ethnicity, level of parental supervision, previous exposure to Internet safety messages, number of computers at home, grade when started using Internet, and computer skills) that might influence the outcomes of interest (i.e., knowledge of Internet safety and behavior online). These characteristics or covariates are included in the model to enhance the comparability of the treatment and comparison groups.
- Level 3: classroom information. This level accounts for whether the classroom was a treatment or comparison classroom. It also takes into account three factors (or covariates) related to treatment fidelity and intensity: average hours of curriculum, total number of youth empowerment activities completed, and percentage of total activities implemented across the five lessons.

Using these three levels of data, five models were developed to test for a variety of effects, including differences in outcomes between the treatment and comparison groups over time, differences in outcomes by grade, and differences in outcomes with respect to the fidelity with which the curriculum was implemented.

# 6. SUMMARY

This study was implemented in six sites in three states: Okalahoma, Nebraska, and Kentucky. The evaluation used several key methods for collecting data, including document reviews, interviews with principals and teachers, focus groups with students, and an online survey completed by more than 2000 students. Data were analyzed using both qualitative and quantitative methods. The next chapter presents the findings from the process evaluation, followed by Chapter 4, which presents the findings from the outcome evaluation.

**III. PROCESS EVALUATION FINDINGS** 

# **III. PROCESS EVALUATION FINDINGS**

As reported in the methodology chapter, the process evaluation was intended to assess how the program was implemented at each site. Specifically it focused on factors affecting implementation, the field's perceptions of the curriculum, and the cost of the curriculum. The process evaluation was developed with three primary questions in mind. These are:

- How was the i-SAFE program implemented?
- Was the i-SAFE program implemented with fidelity?
- How is the program perceived in the field?

To answer these questions, information was gathered through focus groups with students and interviews with teachers, principals, district coordinators, and i-SAFE staff members. Below we discuss findings for each of the process evaluation research questions.

# 1. HOW WAS THE i-SAFE PROGRAM IMPLEMENTED?

To answer this question, data were gathered via the fidelity checklists regarding several important aspects of curriculum implementation, including the class period during which the curriculum was implemented, the number of days used to implement the curriculum, and the number of days between sessions. There were 14 treatment schools (those implementing the curriculum in the fall of 2004) included in the process evaluation. Five of these schools implemented the program during computer/technology classes, four schools implemented it during library time, two schools implemented it during core courses (e.g., English, social studies, math), and three schools implemented it in advisory or elective class courses (e.g., study skills, business).

Twelve of the schools had one instructor assigned to teach the i-SAFE curriculum; however, one school had two teachers, and another school had a team of five teachers assigned to teach the class. In total, the curriculum was taught in 83 classrooms.<sup>1</sup> The number of classrooms taught by each teacher ranged from 1 to 18, with teachers teaching an average of 6 classrooms.

As shown in Exhibit III-1, generally, the i-SAFE lessons were taught in a relatively short amount of time, with about half of the teachers completing the curriculum in one week.

<sup>&</sup>lt;sup>1</sup> Eighty-three is the total number of classrooms, but only 79 classrooms were used in the analysis because two schools that provided 4 classrooms did not have a comparison school.

Weeks for curriculum delivery <sup>2</sup>	Number of classrooms	Percent of total <sup>3</sup>
1	43	51%
2-3	15	18%
4-5	11	13%
6 or more <sup>4</sup>	14	17%
Total	83	99%

#### EXHIBIT III-1: NUMBER OF WEEKS TO DELIVER CURRICULUM

# 2. WAS THE i-SAFE PROGRAM IMPLEMENTED WITH FIDELITY?

To answer this question, fidelity checklists were developed for each grade and lesson of the curriculum. To determine the extent to which the curriculum was implemented as was intended by the curriculum developers, three measures of fidelity were developed. The first measure was the percentage of activities implemented relative to the number of activities that were included in the lesson plan. The number of activities varies by grade as shown in Exhibit III-2. No classroom implemented all of the intended activities. As a result, instead of using the recommended number of activities to calculate percentages, the maximum number of activities that was implemented in each grade was used as the denominator to calculate the percent of activities implemented. Exhibit III-2 displays the total number of activities designed by the i-SAFE developers and the maximum number of activities implemented by the 83 classrooms participating in the study.

Lessons Grade	Total number of activities included	Maximum number of activities
Level	in the i-SAFE curriculum	accomplished
5	21	20 (2 classrooms out of 18)
6	29	25 (4 classrooms out of 20)
7	24	20 (3 classrooms out of 17)
8	23	21 (3 classrooms out of 28)

**EXHIBIT III-2: NUMBER OF ACTIVITIES BY GRADE** 

 $<sup>^{2}</sup>$  If number of additional school days was 3 or more, total was rounded to the next week. (e.g., If a complete session took 4 weeks and 3 days to deliver, it would be considered 5 weeks)

<sup>&</sup>lt;sup>3</sup> Total does not equal 100% due to rounding.

<sup>&</sup>lt;sup>4</sup> Only one classroom took more than seven weeks to finish the entire curriculum.

Although few classrooms completed the maximum number of activities for the particular lesson, all the classrooms implemented more than 50 percent of the total number of activities (See Exhibit III-3)

Grade	Mean Percentage of the Activities implemented	
5	70 %	
6	85%	
7	76%	
8	74%	

**EXHIBIT III-3: MEAN PERCENTAGE OF THE ACTIVITIES IMPLEMENTED** 

The second measure of fidelity was the average number of minutes that instructors spent teaching each of the five lessons. The average amount of time teachers spent on each lesson was 42 minutes, which allowed teachers to fit lessons into one class period. However, for 72 percent of the lessons taught, teachers reported feeling rushed for time. The mean number of minutes by grade is presented in Exhibit III-4.

Lesson grade level	Average number of minutes
5	47
6	40
7	38
8	42

**EXHIBIT III-4: AVERAGE NUMBER OF MINUTES BY GRADE** 

The final fidelity measure was the total number of youth empowerment activities (YEA) implemented across lessons. This measure was selected because YEA are considered a core component of the i-SAFE program. As shown in Exhibit III-5, fifth and seventh grade classes had the highest percentage for completion of the youth empowerment activities.

<b>EXHIBIT III-5: PERCENT OF YOUTH EMPOWERMENT A</b>	ACTIVITIES
COMPLETED BY GRADE	

Grade	Percent of Youth Empowerment Activities Completed
5	50%
6	20%
7	47%
8	22%

Overall, schools made efforts to implement the program with fidelity, and all teachers implemented all five lessons. In 65 percent of all lessons taught across classrooms<sup>5</sup>, however, teachers reported challenges implementing the lesson. First, the most frequently reported challenge was not having enough time to complete activities. This was followed by the conflict between implementing i-SAFE or other school activities. Finally, teachers reported children's misbehavior in the classroom as a challenge to implementation. Teachers reported a number of ways in which they addressed these challenges, including omitting activities or parts of the lesson to fit the class time period, adding a few more minutes to the lesson, carrying the lesson over into the next lesson, and conducting activities in larger rather than smaller groups. The youth empowerment activities included with each lesson posed a particular problem. Few teachers had enough time to get through the lesson within the time frame they had, and therefore they could not complete the additional youth empowerment activities.

In addition to the five lessons, the i-SAFE curriculum also encourages schools to implement the community outreach component of the program. In total, six schools implemented the community outreach component or the peer-to-peer component of the program, in addition to the five core lessons. Teachers who implemented outreach activities with their students reported that the activities helped get parents and the community involved in the program.

# 3. HOW IS THE i-SAFE PROGRAM PERCEIVED?

The evaluation gathered information about teachers', principals', and students' perceptions of the i-SAFE program. Based on interviews with principals and teachers who implemented the program, information on program strengths and challenges is presented in the first section below. In the second section, we present students' perceptions of the i-SAFE curriculum, based on focus groups conducted with them.

# 3.1 School Perspective

In general, principals and teachers felt that the curriculum covered a critical and relevant topic. Although teachers encountered some challenges during implementation, they were generally positive about the curriculum and its importance. Teachers also reported that the PDP training helped prepare them to implement the curriculum.

<sup>&</sup>lt;sup>5</sup> The fidelity checklists were used to estimate these numbers. A total of 415 fidelity checklists were completed (83 classrooms \* 5 lessons).

# 3.2 i-SAFE Program Strengths

Interviews were conducted with 19 teachers from 14 treatment schools. During these interviews, teachers were asked to report on what they felt to be the strengths of the i-SAFE curriculum. The most frequently reported strengths of the program include:

- Focus on Internet safety. During these interviews, teachers (37 percent) reported that the primary strength of the curriculum was its focus on Internet safety. Other strengths reported include the curriculum activities, the relevance of the content to students, the curriculum materials and training, and the structure of the program.
- Lessons on predators and personal safety. With respect to specific lessons, teachers reported that students enjoyed the lessons on Internet Predators (79 percent) and Personal Safety (37 percent), in particular. Two teachers liked the peer-to-peer discussions, reporting that they provided students with the opportunity to form their own opinions about the topic.
- Relevance to students. Forty-seven percent of the teachers interviewed reported that the material is relevant to the students and that it increased their awareness about the dangers of inappropriate Internet use. They also felt the material was important because the students do not receive this information elsewhere.
- Curriculum materials and training. Fifty-eight percent of the teachers interviewed reported that the curriculum materials were very helpful to them in preparing their lessons plans and the materials were well-organized and easy to implement. Forty two percent reported that the videos were particularly realistic, which, they felt, helped to emphasize the message about the importance of Internet safety. Finally, 16 percent noted that the PowerPoint presentations helped them to stay on topic during the lesson.
- PDP training sessions. Fifty-eight percent of the teachers felt that the PDP training sessions were informative; however, 26 percent felt that the training did not give them enough information specific to implementation (e.g. assistance on implementing certain activities, tips for making activities successful). These teachers reported that they would have liked more information about implementation topics such as how to implement successful activities and how to focus lessons when time was limited. They also would have liked more hands-on experience with the material.
- Structure of the program. Sixteen percent of the teachers commented on the flexibility and brevity of the curriculum. They felt the number of lessons was appropriate for completing the curriculum in a week. They also reported that the flexibility inherent in the curriculum made it suitable for teaching in many different types of school environments and classrooms (e.g. computer class, business/marketing class, library time).

# 3.3 i-SAFE Program Challenges

In addition to its strengths, teachers also were asked to talk about the challenges they experienced while implementing the program. These include:

- Time constraints. The primary implementation challenge reported was time constraints. Seventy-nine percent of the teachers interviewed commented that there was not enough time to adequately cover the material in the curriculum. Another 32 percent recommended teaching the curriculum over a longer period of time or extending the amount of classroom time allotted for each lesson. Several teachers (21 percent) modified the curriculum so that they could complete the full lesson in the time allotted, while others (26 percent) chose instead to teach only some components of the lesson.
- Children with limited computer exposure. Twenty-six percent of the teachers interviewed reported that many children did not have computers in their homes, and that this posed a challenge to implementation. Specifically, children without home computers seemed to require more explanation, preparation, and an even greater time commitment during lessons than did children with home computers.

# 3.4 i-SAFE Program Lessons Learned

Nineteen teachers were asked: "What advice would you give to other teachers who were planning to implement the i-SAFE curriculum?" They also were asked about the types of training and technical assistance activities that they felt would help them keep children safe on the Internet. Most commonly, teachers recommended that other teachers set aside enough time to teach the full curriculum, especially in cases where they were planning to implement activities (47 percent). Other recommendations were to integrate the curriculum into the school curriculum as one of the core courses (32 percent) and to teach the program over a longer period of time (21 percent). Teachers felt that these recommendations would not only make the curriculum easier to implement, but would maximize the effects students received from it. Because the Internet field evolves so quickly, teachers also reported wanting ongoing training or booster sessions to help them keep abreast of new issues related to Internet safety (47 percent).

Teachers talked about the need for recurring training and updated information dissemination due to the constant changes in the Internet safety field. Some of the specific training topics identified included hands-on computer training for those teachers who are not very experienced with the Internet (e.g. how to check the histories of the sites that children are visiting and information about inappropriate pop-ups), assistance on how to implement specific lessons and activities in the curriculum, and information about youth computer usage (e.g. chatrooms, instant messaging, youth usage trends)

# 4. COST REVEIW

A cost review of the i-SAFE program was conducted. The review determined the cost of the curriculum to the developers and to the schools, the cost of the blocking and filtering software in use by school districts to protect students, and the cost of inappropriate use of the Internet by students.

# 4.1 What is the Cost of the i-SAFE Program?

There are two components to the cost of the i-SAFE curriculum: the cost of development and production, and the cost to the schools. Each of these is discussed below.

**Development Costs.** To determine the cost of the i-SAFE curriculum, i-SAFE America Inc. calculated the total cost to develop the curriculum and the total number of students taught in a given school year. The cost of development included costs for i-SAFE personnel and other overhead (e.g. salaries, benefits, travel, equipment, supplies), and costs for shipping and materials (i.e., producing and shipping the curriculum and related materials such as videos). The number of students taught in a given school year was extracted from the implementation plans submitted to i-SAFE America, Inc. each year by schools planning to implement the program. As a result, some students might have been missed.

During the 2003-2004 school year, the first year for which program cost estimates were available, the personnel and overhead (overhead/burden) cost was approximately \$1,522,556 and the shipping/materials cost was approximately \$586,980. The total cost of the curriculum was \$2,109,537. When this number is divided by the number of students served in that same year (N = 238,900) the total cost per student was \$8.83.

During the 2004-2005 school year, the curriculum was distributed in electronic format, resulting in fewer paper materials. This led to a significant reduction in costs. The overhead/burden cost was approximately \$1,078,524 and the shipping/materials cost was approximately \$800,212, resulting in a total cost for the school year of \$1,878,737. Considering the approximately 450,000-500,000 students who were taught the i-SAFE curriculum in this same year, the total cost per student was approximately \$3.99 to \$4.33.

In discussions with i-SAFE America, Inc., personnel indicated that they expect the costs of the curriculum to drop even further for the 2005-2006 school year because they plan to use more digital and online materials (meaning less paper). They expect the costs to be around \$2.00-\$3.00 per student.

**School Cost.** The i-SAFE curriculum is provided at no cost to the schools that implement it. However, i-SAFE America, Inc. does require that each i-SAFE instructor attend an approved i-SAFE PDP seminar. After attending the PDP, the instructor is required to submit an implementation plan to i-SAFE America. Once the plan has been received, the instructor then orders curriculum materials (curriculum, videos, cds) from the online store on the i-SAFE America Web site.

While there is no charge to schools to receive the curriculum, there can be some inherent costs to the school to implement it. The curriculum comes in electronic format, on a CD-ROM. Therefore, the school must assume any printing and copying costs for handouts, lessons, and activities. Additionally, the cost of the teacher's salary for the time spent teaching the i-SAFE curriculum is assumed by the school. These costs can vary dramatically based upon location and the types of activities implemented. The i-SAFE curriculum was created to be flexible; that is teachers could choose different activities and conduct them using different methods (e.g., on the computer, using paper and pencil). Additionally, each lesson has associated youth empowerment activities, which may require art supplies, video cameras and costumes. It is the case then that teachers who implement activities and use paper handouts and activity sheets assume higher costs than those who do not implement supplemental activities and use the computer for lessons.

# **4.2** What is the Cost of Installing and Maintaining the Blocking and Filtering Software for all the Computers in Each School in the District?

Filtering and blocking software have been developed and marketed with the purpose of limiting children's exposure to inappropriate materials on the Internet. These software programs allow adults to block children's access to unapproved Web sites and unwanted contact with individuals. They also are used to filter graphic descriptions or images from otherwise approved Web sites, to block children's personal information from being posted on the Internet, and to monitor their online activities. To protect students from accessing inappropriate Internet material while at school, each school district purchases, installs and maintains blocking and filtering software for all schools in the district.

The cost for purchasing and maintaining the software, including a contract for regular updates, varies greatly by school district. The cost tends to be based on the number of students in the district, or the number of possible simultaneous users or computers the district maintains. For the schools in this study, the costs for the blocking and filtering software were higher for school districts in Kentucky and Oklahoma, than it was for those districts in Nebraska. This is because Nebraska uses a regional system, which costs less than a district by district system. In Kentucky and Oklahoma, the costs for the blocking and filtering software are based upon the number of students, the number of computers, or the number of simultaneous users. The prices can range from about \$44,000 for three years for 3500 computers, to \$20,000 per year for 5000 simultaneous users. Districts can choose the extent of the capabilities of the software, which affects the total cost. For example, a district could choose a software program that allows a report of all Internet sites blocked during a given time; however, the program would cost more than a program with less sophisticated reporting capabilities. Purchasing and maintaining the software can require a large percentage of a district's technology budget, making it difficult to provide for other technology needs.

In Nebraska, a regional system is used for providing technology assistance. This helps offset the costs for small school districts, which may only include one or two schools. For example, in one region, a school district pays \$.75 per student for the use of the regional level blocking and filtering software. The region pays approximately \$.65 per student to the software company for the license and uses the remaining funds to purchase and maintain servers and any other hardware necessary for the region. The region does not fund any part of the hardware or software required out of its own funds. The region blocks three categories of Web sites (crime, sex acts, and violence) and allows school districts to block any of thirty other categories (e.g. games, e-mail, art nudity).

# 4.3 On Average, How Many Hours per Month do School Staff Spend Dealing with Incidents of Inappropriate Internet Use? What is the Approximate Cost per Hour?

Serious incidents of inappropriate Internet use during school are uncommon, though minor or accidental incidents tend to happen fairly regularly. Accidental and minor incidents of inappropriate Internet use (e.g. stumbling across an inappropriate Web site, playing games online) tend to be handled quickly by the classroom teacher. In the case of inappropriate Web sites coming through the blocking/filtering software, the teacher notifies the district computer administrator who ensures the site is blocked from future access. When a student violates school rules in a minor way, the student tends to be warned or prohibited from using the computer for a specified length of time. The amount of time spent dealing with minor or accidental incidents of inappropriate Internet use cannot be quantified because record keeping about these incidents is limited.

For more serious incidents, school administrators, counselors, teachers, and sometimes district officials or law enforcement become involved depending on the nature and severity of the incident. Primarily, incidents are handled at the school level, with district administrators involved only in the most severe cases. Additionally, more severe incidents tend to be rare at the elementary school level and, while not unheard of, are still relatively uncommon at the middle

school level. During this study, there were only three schools that reported more than three incidents of serious inappropriate use (i.e., requiring administrative involvement). More severe incidents could include cyber bullying, purposely looking at inappropriate sites at school, accessing inappropriate images through search engines, downloading inappropriate lyrics at school, and accessing blogging sites (e.g. xanga.com) at school.

School or district administrators do not routinely gather cost information regarding time spent addressing inappropriate incidents of Internet use. As a result, it was not possible to develop a cost estimate for it. However, when asked, school and district administrators reported that they and their staff spend a minimal amount of time addressing incidents of inappropriate Internet use. Reports from principals indicated that an average incident might take one to four hours of principal and or school staff time (e.g. counselors, teachers, technicians), depending upon the severity of the incident. Principals also indicated that it is important to recognize the time spent by parents, district level computer administrators who block sites, and law enforcement, when involved. Principals indicated that the costs per hour for each incident can range from the teacher salary of \$25 - 60 dollars per hour for dealing with minor incidents to several hundred dollars per hour when adding in the time required of principals, counselors, parents, computer technicians, and law enforcement. For more severe incidents, the costs can easily multiply quickly.

# 5. SUMMARY

This chapter presented findings from the process evaluation, including information on the fidelity of program implementation and the implementation characteristics that were reported to affect program outcomes.

In general, classroom teachers are responsible for implementing the curriculum during computer/technology classes, although in several schools, the curriculum was taught during library time. Due to time constraints, most often, teachers were not able to implement the curriculum in the recommended number of sessions for the recommended amount of time. In fact, the most common complaint from teachers implementing the curriculum was that there was not enough time in the school day to teach it in the manner intended. Teachers also reported that time constraints forced them to use lecture rather than activities to teach the curriculum. The issue of time constraints is not surprising given the number of classes and amount of work teachers have in a normal school day without the addition of the I-SAFE curriculum.

Overall, principals and teachers had very positive perceptions of the curriculum, reporting that it covered a critical and relevant topic. The two major challenges associated with

implementing the curriculum were time constraints and teaching children with limited computer experience.

Finally, teachers made several recommendations for improving implementation, including making sure to have enough time set aside to teach the curriculum as intended and having the national i-SAFE office provide ongoing training and updated information on Internet safety to teachers implementing the curriculum.

The next chapter presents the findings from the outcome evaluation in relation to knowledge gain and behavioral change.

**IV. OUTCOME EVALUATION FINDINGS** 

# IV. OUTCOME EVALUATION FINDINGS<sup>1</sup>

# 1. INTRODUCTION

The outcome evaluation was developed around the following three primary research questions:

- Do students retain the knowledge received during i-SAFE lessons?
- Do they use this knowledge?
- At what reduced levels or intensities of implementation are program benefits no longer measurable?

To answer these questions, data were collected via an online student self-report survey administered to participants six times throughout the 2004 – 2005 school year. Questions were closely tied to the learning objectives of the curriculum and included questions about such topics as virus protection, personal information on the Internet, Internet predators, intellectual property law, Internet risk management, and inappropriate online behavior. The data were analyzed using HLM, a statistical procedure that allows for the handling of nested data (i.e., students exist within such multiple and hierarchical structures as the classroom, their grade, the school, the school district, and the state). In this study, multiple repeated measurements (6 surveys) were administered to students (time nested within students), and students were members of a classroom (students were nested within classrooms). This chapter only contains the interpretation of the statistical analysis conducted. Results of the tests performed to assess the equivalence of the treatment and comparison groups at baseline are included in Appendix 9, the means for each outcome by time are included in Appendix 10, and the results of the HLM analysis are included in Appendix 11.

The chapter is organized first by research question and then, within the research question section, by scale. The scales are those that were developed to answer the research question. For example, there were seven scales developed to assess children's knowledge retention. These seven scales, then, were used to organize the section on children's knowledge retention. Within the scales, the findings are then presented using the following three categories:

■ Treatment versus Comparison Groups—where the findings are presented in relation to the treatment and comparison groups (i.e., On average, does the treatment group

<sup>&</sup>lt;sup>1</sup> Only six of the original eight sites were included in the statistical analyses. Two of the original eight sites did not have comparison groups and so were excluded from the analyses.

score higher on a specified outcome than the comparison group? Do the treatment group and the comparison group change over time?)

- Treatment versus Comparison Groups by Grade—where the findings are presented in relation to grade (i.e., Are the effects different for students in lower grades as compared to higher grades?)
- Independent Variables<sup>2</sup>—where the findings are presented in relation to the independent variables for all participants, regardless of group membership (i.e., Do computer skills and previous computer knowledge have an effect on Internet safety knowledge for all youth?)

The chapter begins with a presentation of the findings related to the first research question: Do students learn and retain the material taught in the curriculum. The second section presents the findings related to the second research question: Do students apply this knowledge to their online behavior. The last section presents the findings related to the third research question: At what reduced levels or intensities of implementation are program benefits no longer measurable? A discussion of the findings is presented in the chapter that follows.

# 2. RESEARCH QUESTION 1: DO STUDENTS RETAIN THE KNOWLEDGE RECEIVED DURING i-SAFE LESSONS?

Seven scales were used to assess children's retention of knowledge.<sup>3</sup> These scales were Internet safety knowledge, predator identification, intellectual property knowledge related to theft, intellectual property knowledge related to media products, managing risk, sharing personal information, and computer viruses. The main finding here is that over the nine-month period of observation, students who participated in the i-SAFE program learned the information presented and retained that knowledge. Results of the analysis for each of the scales are presented below.

### 2.1 Internet Safety Knowledge

Internet Safety Knowledge was measured with a scale ranging from 1 to 4 (1 =nothing at all, 2 = a little, 3 = some, and 4 = a lot). A higher score is indicative of greater knowledge of the concepts tested. There are seven questions that make up this scale (see Appendix 7 for scale items).

 $<sup>^2</sup>$  Only the independent variables that were found to affect outcomes regardless of group membership are discussed in this chapter. That is, these independent variables had an effect on the outcomes of interest for all children in the study, regardless of whether they had received the i-SAFE curriculum or not. Appendix 12 contains a complete list of independent and dependent (outcome) variables that were included in the analysis.

<sup>&</sup>lt;sup>3</sup> All of the scales and their corresponding items are in Appendix 7.

# **Treatment versus Comparison**

- **Treatment group knew less at baseline:** The mean of the treatment group was lower on this outcome than the comparison group at pretest (time 1), indicating that the treatment group did not know as much about Internet safety as the comparison group.
- Treatment group knew more, on average: The treatment group mean was higher than the comparison group mean over the period of observation, and the difference was statistically significant. In other words, the average Internet safety knowledge score for students who took the i-SAFE curriculum was higher than the average score of students who did not participate in the program.
- Treatment group learned more over time: The treatment group experienced a large gain in knowledge from pretest (time 1) to posttest (time 2), then a slight loss in knowledge at time 3, followed by another gain by the final period of observation (time 6). In contrast, the average knowledge score for the comparison group increased slightly from pretest to post-test, but remained relatively flat overall (no change on the average knowledge scores). (See Exhibit IV-1.)

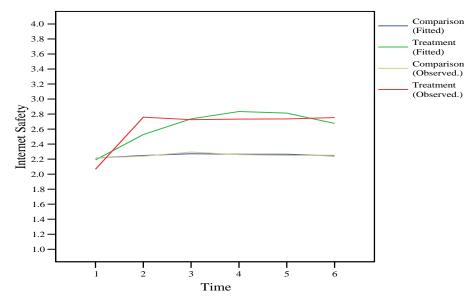
# Treatment versus Comparison by Grade

■ Effect was larger for lower grades: The results of the comparison by grade indicated that the effect of the treatment was larger for the lower grades than for the higher grades. As presented in Exhibit IV-2, the knowledge of the fifth graders surpassed the knowledge of the eighth graders by the end of the observed period.

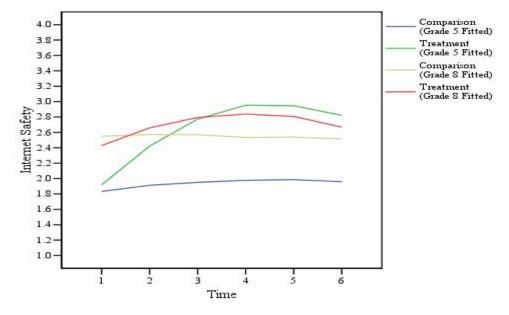
# **Independent Variables**

- Race, computer skills and previous knowledge had an effect on knowledge, in general: Regardless of group membership (treatment or comparison), race, computer skills, and previous computer knowledge were associated with the overall average score on this scale. African American and Hispanic students had lower average knowledge scores on this outcome than students of other races. Students who reported having good computer skills and high exposure to previous Internet safety messages had higher average knowledge scores.
- Boys retained less knowledge than girls, in general: Regardless of group membership (treatment or comparison), boys retained less knowledge than girls over time.

#### **EXHIBIT IV-1: INTERNET SAFETY SCALE BY TIME**



**EXHIBIT IV-2: INTERNET SAFETY SCALE BY TIME BY GRADE** 



### 2.2 Predator Identification

This scale measures knowledge of possible actions of Internet predators. The scale ranges from 1 to 5 (1=strongly disagree, 2=disagree, 3= don't know, 4= agree, and 5= strongly agree). A higher score on this scale indicates greater knowledge. There are six questions that made up this scale (see Appendix 7 for scale items).

### **Treatment versus Comparison**

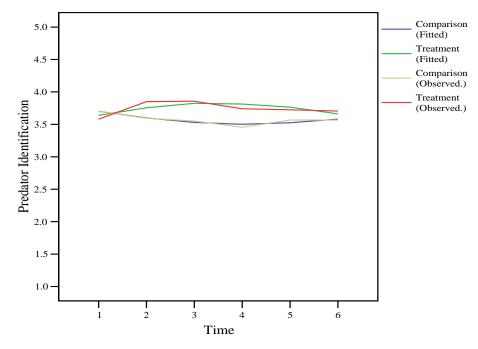
- **Treatment group knew less at baseline:** The average knowledge level of the treatment group was lower on this scale than the comparison group at baseline, indicating that the treatment group did not know as much about Internet predators as the comparison group.
- Treatment group knew more, on average: The average knowledge level of the treatment group was higher than that of the comparison group over the observed period, and the difference was statistically significant. In other words, the average knowledge of students who participated in the i-SAFE curriculum was higher than the average knowledge of students who did not participate in the program.
- Treatment group learned more over time: The treatment group experienced a large gain in knowledge from pretest (time 1) to posttest (time 2) and a loss of knowledge from time 3 to time 4. By the last administration of the survey (time 6) the treatment group's knowledge leveled out. In contrast, the average knowledge level for the comparison group decreased from pretest to posttest, but remained fairly constant during the subsequent time periods. (See Exhibit IV-3.)

#### Treatment versus Comparison by Grade

Effect was larger for lower grades: With regard to predator identification, the i-SAFE curriculum was more effective for students in the lower grades. Specifically, students in the lower grades experienced greater knowledge gains than students in the higher grades, over time. As presented in Exhibit IV-4 the knowledge of the fifth graders surpassed the knowledge of the eighth graders by the end of the observed period.

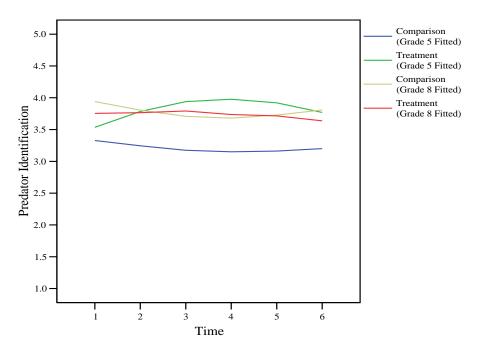
#### **Independent Variables**

- Race, computer skills and previous knowledge had an effect on knowledge, in general: Regardless of group membership (treatment or comparison), race, computer skills, and previous knowledge were associated with the overall average score on this scale. Hispanic students had lower average knowledge scores on this scale than students of other races. Students who reported having good computer skills and high exposure to previous Internet safety messages had higher average knowledge scores.
- Boys retained less knowledge than girls, in general: Regardless of group membership (treatment or comparison), boys retained less knowledge than girls, over time.



**EXHIBIT IV-3: PREDATOR IDENTIFICATION SCALE BY TIME** 

**EXHIBIT IV-4: PREDATOR IDENTIFICATION SCALE BY TIME BY GRADE** 



2.3 Intellectual Property Knowledge: Theft

The Intellectual Property Knowledge: Theft scale measures knowledge related to such intellectual property theft as downloading media from the Internet without paying for it and

copying Web materials without citing the source. This scale ranges from 0 to 1. Higher scores indicate greater knowledge. There were two questions that made up this scale (see Appendix 7 for scale items).

### **Treatment versus Comparison**

- Treatment group knew less at baseline: The mean of the treatment group was slightly lower on this outcome than the comparison group at pretest (time 1), indicating that the treatment group's knowledge of intellectual property was slightly less than the comparison group.
- **Treatment group knew more, on average:** The treatment group mean was higher than the comparison group mean over the period of observation and the difference was statistically significant. In other words, the average knowledge level of students who participated in the i-SAFE curriculum was higher than the average knowledge level of students who did not participate in the program.
- Treatment group learned more over time: The treatment group displayed an increase in knowledge on this outcome from pretest (time 1) to posttest (time 2), but showed a decrease during subsequent observations. Despite this decrease, the treatment group maintained its gains over the comparison group, as evidenced by their higher knowledge scores at the final observation. In contrast, the control group's knowledge decreased steadily over time, before leveling out during the final period of observation (see Exhibit IV-5).

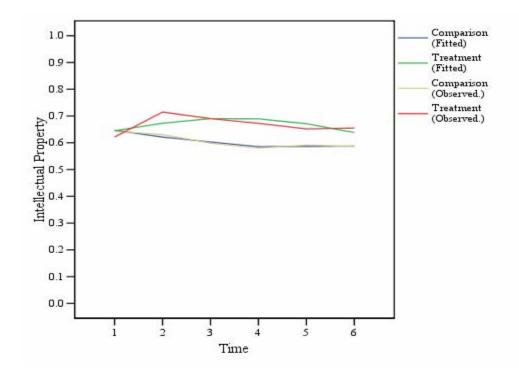
# Treatment versus Comparison by Grade

■ Effect was larger for lower grades: With regard to knowledge of intellectual property issues, students in lower grades experienced greater knowledge gains than students in the higher grades. As presented in Exhibit IV-6 the knowledge of the fifth graders surpassed the knowledge of the eighth graders by the end of the observed period.

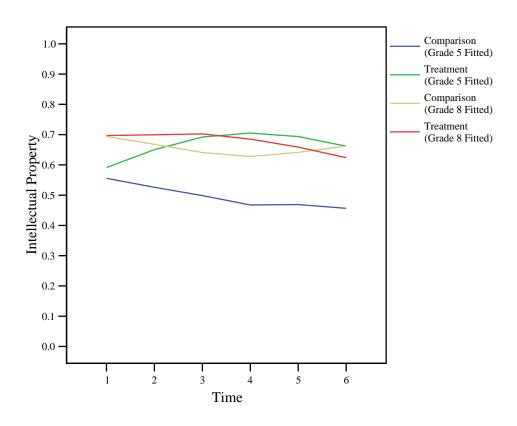
# **Independent Variables**

- Gender, computer skills, and previous knowledge had an effect, in general: Regardless of group membership (treatment or comparison), gender, computer skills, and previous knowledge were associated with the overall average score on this scale. African American students had lower average knowledge scores on this scale than students of other races. Students who reported having good computer skills and high exposure to previous Internet safety messages exhibited higher average knowledge scores.
- Computer skills had an effect, in general: Regardless of group membership (treatment or comparison), students who had higher average scores on the computer

skills scale retained more knowledge over time on this scale than students who had lower average computer skills scores.



# **EXHIBIT IV-5: INTELLECTUAL PROPERTY KNOWLEDGE: THEFT BY TIME**



# EXHIBIT IV-6: INTELLECTUAL PROPERTY KNOWLEDGE: THEFT BY TIME BY GRADE

## 2.4 Intellectual Property Knowledge: Media

This scale measures knowledge of intellectual property theft related to legal rights of purchased media. This scale ranges from 0 to 1 (0=yes, 0.5=don't know, 1=no). A higher score on this scale indicates greater knowledge. There were two questions that made up this scale (see Appendix 7 for scale items).

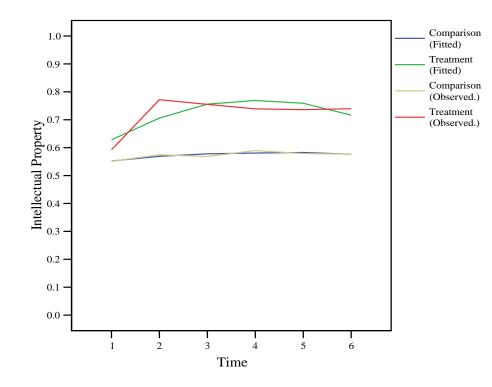
### **Treatment versus Comparison**

- **Treatment group knew more at baseline:** The mean of the treatment group was higher on this scale than the comparison group at baseline, indicating that the treatment group knew more about intellectual property than the comparison group.
- Treatment group knew more, on average: The treatment group mean was higher than the comparison group, and the difference was statistically significant. In other words, the average knowledge level of the students who received the i-SAFE curriculum was higher than the average knowledge level of comparison group students.

Treatment group learned more, over time: The treatment group displayed an increase in knowledge from pretest (time 1) to posttest (time 2), a loss of knowledge at time 3, and then little if any change in knowledge level during the subsequent time periods. At the end of the observed period, the treatment group had higher knowledge than the comparison group. The comparison group's knowledge increased slightly before leveling out during the final two observations (see Exhibit IV-7).

#### **Independent Variables**

■ Parental supervision had an effect, for all youth: Regardless of group membership (treatment or comparison), parental supervision was associated with the overall average score on this scale. Students with high parental supervision had higher average knowledge scores on this scale than students with low parental supervision.



# EXHIBIT IV-7: INTELLECTUAL PROPERTY KNOWLEDGE: MEDIA BY TIME

# 2.5 Managing Risk

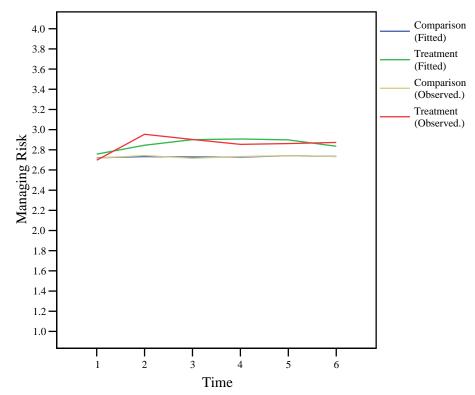
Students' attitudes about the risk of interacting with others online were measured using a scale ranging from 1 to 4 (1=not at all likely, 2=a little likely, 3= somewhat likely, and 4=very likely). A higher score, which is desirable, is associated with a higher perceived risk. There were four questions that made up this scale (see Appendix 7 for scale items).

# **Treatment versus Comparison**

- Treatment group perceived less risk at baseline: The mean of the treatment group was slightly lower on this outcome than the comparison group at baseline, indicating that the treatment group perceived less risk associated with interacting with others online than did the comparison group.
- Treatment group perceived higher risk, on average: Overall the treatment group mean was higher than the comparison group, and the difference was statistically significant.
- **Treatment group perceived higher risk, over time:** The mean for the treatment group increased between pretest and posttest, then decreased after posttest. Perceived risk was relatively level during the subsequent time periods. The mean for the comparison group remained relatively flat. That is, perception of risk for the comparison group did not change over time (see Exhibit IV-8).

# **Independent Variables**

- Gender and previous Internet safety knowledge had an effect: Regardless of group membership (treatment or comparison), gender and previous knowledge of Internet safety were associated with the overall average score on this scale. Boys had lower average scores than girls (i.e., boys perceived less risk of interacting with others online than did girls). Students who had high exposure to previous Internet safety messages reported higher perception of risk than students with low exposure.
- **Boys perceived less risk, in general:** Regardless of group membership (treatment or comparison), the perception of risk decreased more for boys than for girls.



# **EXHIBIT IV-8: MANAGING RISK BY TIME**

#### 2.6 Sharing Personal Information

Knowledge of safe Internet online behavior pertaining to sharing personal information was measured with a scale ranging from 1 to 3 (1=strongly disagree, 2=disagree, and 3= agree and strongly agree)<sup>4</sup> Lower scores on this outcome indicate greater knowledge about the dangers of providing personal information online. There were three questions that made up this scale (see Appendix 7 for scale items).

#### **Treatment versus Comparison**

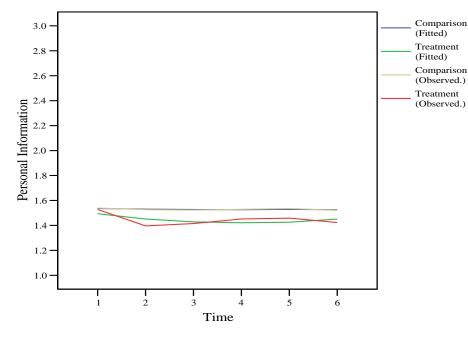
- **Treatment and comparison group the same at baseline:** The mean of the treatment group was essentially the same as the comparison group at baseline, indicating that both groups felt it was not safe to give personal information online.
- Treatment group felt strongly about not giving out personal information: Overall, the treatment group mean was lower than the comparison group mean, meaning they felt more strongly than the comparison group that it was not safe to give personal information online.

<sup>&</sup>lt;sup>4</sup> Based on the small number of responses, the categories agree and strongly agree were collapsed into one.

Treatment group learned more, over time: The mean for the treatment group decreased between pretest (time 1) and posttest (time 2), which is the desired trend for this outcome (lower scores indicate greater knowledge). After posttest (time 2), the treatment group steadily increased their scores, which for this scale indicates a loss of knowledge (higher scores indicate less knowledge). However, at the end of the study, the treatment group had more knowledge than the comparison group (see Exhibit IV- 9). The comparison group remained relatively flat, over time.

#### **Independent Variables**

Previous knowledge had an effect: Regardless of group membership (treatment or comparison), previous knowledge of Internet safety was associated with the overall average score on this scale. Students who had higher exposure to previous Internet safety messages reported greater knowledge on this outcome.



### **EXHIBIT IV-9: PERSONAL INFORMATION BY TIME**

### 2.7 Computer Viruses

Participants' knowledge about how computer viruses are spread was measured with a scale ranging from 1 to 3 (1=strongly disagree, 2=disagree, 3=agree and strongly agree<sup>5</sup>). Lower scores on this outcome, which are desirable, indicate greater knowledge and/or perceived risk. There were three questions that made up this scale (see Appendix 7 for scale items).

<sup>&</sup>lt;sup>5</sup> Based on the small number of responses, the categories agree and strongly agree were collapsed into one category.

# **Treatment versus Comparison**

- Treatment and comparison group the same at baseline: The mean of the treatment group was essentially the same as the comparison group at baseline, indicating that both groups had the same level of knowledge about how computer viruses are spread.
- Treatment group knew more, on average: The treatment group mean was lower than the comparison group mean over the observed period. This means that, on average, the treatment group had more knowledge about how viruses are transmitted than the comparison group (lower scores on this scale indicate greater knowledge).
- **Treatment group learned more, over time:** The mean for the treatment group steadily decreased between time 1 and 3 (indication of gain in knowledge), leveled out between time 3 and 5, and then decreased between time 5 and 6. The comparison group remained relatively flat over time (see Exhibit IV-10).

### **Independent Variables**

Parental supervision had an effect, in general: Regardless of group membership (treatment or comparison), parental supervision was associated with the overall average score on this scale. Students with high parental supervision had more knowledge about how computer viruses are spread than students with low parental supervision.

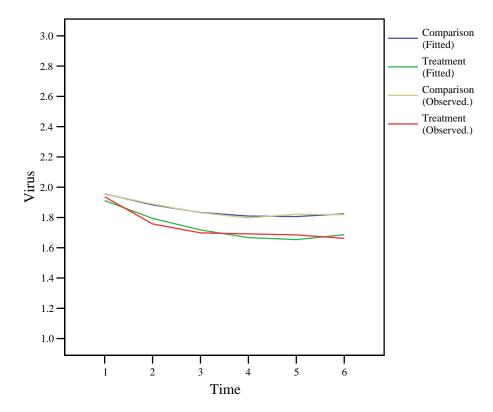


EXHIBIT IV-10: KNOWLEDGE OF COMPUTER VIRUSES BY TIME

### 3. RESEARCH QUESTION #2: DO STUDENTS USE THIS KNOWLEDGE?

Four scales were used to assess children's behavior as a result of participating in the i-SAFE program. These scales were inappropriate online behavior, comfort level with acquaintances, communication, and e-mail.<sup>6</sup> The analysis of these data indicated that program participants did not alter their behavior as a consequence of participating in the i-SAFE program. However, it is important to note that the treatment and comparison groups reported low levels of risky behavior at the beginning of the study and throughout the period of observation. In other words, the participants were not engaged in risky behavior before or throughout the study. As a result, one would not expect large changes in behavior. Results of the analysis for each of the scales are presented below.

# 3.1 Inappropriate Online Behavior

Frequency of risky and/or inappropriate behavior online was measured with a scale ranging from 1 to 4 (1=not at all, 2=at least once, 3=a few times, and 4=a lot). A lower score indicates that students engage in less risky behavior online. The majority of children participating in the study were not engaging in risky behaviors and/or inappropriate behavior

online at baseline (time 1). Therefore, the opportunity for significant findings here are limited. There were nine questions that made up this scale (see Appendix 7 for scale items).

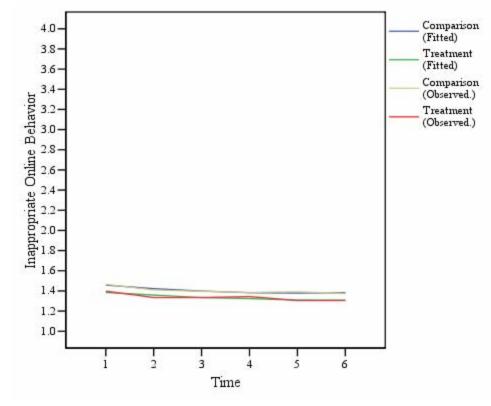
#### **Treatment versus Comparison**

- No differences found between treatment and comparison groups, at baseline: The treatment group scored lower on this outcome than the comparison group at baseline, indicating that the treatment group reported less frequent involvement in risky situations and inappropriate behaviors at baseline (time 1). However, this difference in averages between the treatment and comparison group was not statistically significant. In other words, program participants were not different from the comparison group at baseline.
- No differences found between treatment and comparison groups, over time: The two groups also exhibited the same behavior over time. Both groups experienced a slight decrease in risky behavior from pre-test (time 1) to post-test (time 2), but overall their behavior did not change significantly, over time (see Exhibit IV-11).

#### **Independent Variables**

■ Gender and parental supervision had an effect, in general: Regardless of group membership (treatment or comparison), gender and parental supervision were associated with the overall average score on this scale. Boys had lower average scores than girls, that is, boys reported engaging in more risky behaviors than girls. Students with high parental supervision reported less risky behavior (low average scores on inappropriate online behavior) than students with low parental supervision.

<sup>&</sup>lt;sup>6</sup> All of the scales and their corresponding items are in Appendix 7.



**EXHIBIT IV-11: INAPPROPRIATE ONLINE BEHAVIOR SCALE BY TIME** 

3.2 Comfort Level with Online Acquaintances

The comfort that participants felt with people they met online was measured with a scale ranging from 1 to 6 (1 = a day or less, 2 = a few days, 3 = a few weeks, 4 = a few months, 5 = a year or more, and 6=never). Higher scores for this measure indicate that the participant would not feel comfortable with people they met online, so they would not provide personal information online. The majority of children participating in the study had high scores, indicating that they were not providing personal information to people they met online at baseline (time 1). There were three questions that made up this scale (see Appendix 7 for scale items).

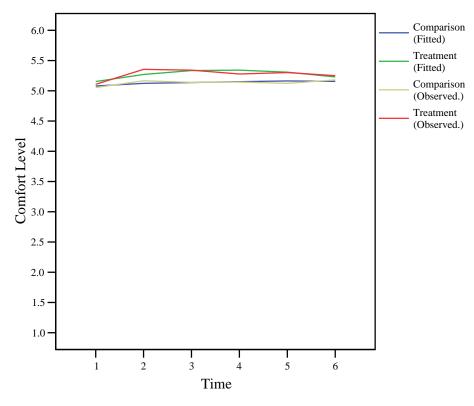
# **Treatment versus Comparison**

No differences found between treatment and comparison groups, at baseline: The treatment group had a higher mean on this outcome than the comparison group at baseline and across the period of observation; however, the difference in means between the treatment and comparison group was not statistically significant. In other words, students participating in the i-SAFE program and students in the comparison group reported, on average, that they would never give their personal information to people they met online. ■ No differences between treatment and comparison groups, over time: There were no significant differences in comfort with online acquaintances between the treatment and comparison groups over the observation period (see Exhibit IV-12).

#### **Independent Variables**

Gender has an effect: Regardless of group membership (treatment or comparison), gender was associated with the overall average score on this scale. Boys had lower average scores than girls. That is, boys reported providing more personal information to people they met online than girls.

# EXHIBIT IV-12: COMFORT LEVEL WITH ONLINE ACQUAINTANCES SCALE BY TIME



### 3.3 Communication

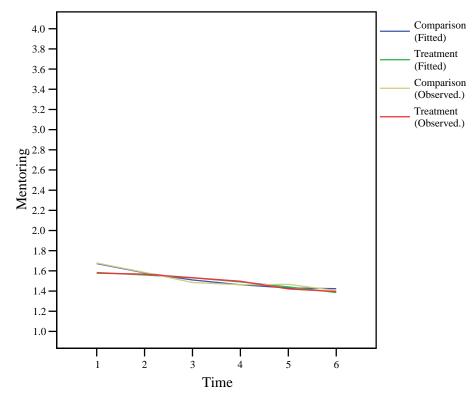
Frequency of discussions that participants had with others about Internet safety messages and practices was measured with a scale ranging from 1 to 4 (1=not at all, 2=at least once, 3=a few times, and 4=a lot.) High scores, which are desirable, on this scale indicate that students engage frequently in discussions with others. There were four questions that made up this scale (see Appendix 7 for scale items).

# **Treatment versus Comparison**

- No differences between treatment and comparison groups at baseline: The treatment group mean was lower than the comparison group at baseline, indicating that the treatment group had fewer discussions with others regarding Internet safety. However, the mean difference between the treatment and the comparison group was not statistically significant. In other words, both groups a had similar frequency of discussions about Internet safety.
- No differences between treatment and comparison groups, over time: There were no significant differences in communication behavior between the treatment and comparison groups over the observation period. Over time the number of conversations about Internet safety was essentially the same for both groups.

# **Independent Variables**

Gender, number of computers in the home, and parental supervision had an effect: Regardless of group membership (treatment or comparison), gender, number of computers at home, and parental supervision were associated with the overall average score on this scale. Boys had lower average scores than girls. That is, girls had more frequent discussions with others about Internet safety than did boys. Students with fewer computers at home engaged in more discussions about Internet safety issues than students with more than one computer at home. Students with high parental supervision engaged in more Internet safety discussions than students with low parental supervision.



## **EXHIBIT IV-13: COMMUNICATION SCALE BY TIME**

### 3.4 E-mail Protocol

Four questions were used to assess whether students practiced safe Internet behavior when creating e-mail accounts or screen names. High scores indicate that students do not include any personal information (name, phone number, sex, address) in their e-mail or screen name. For this scale, only those students that have e-mail accounts and/or a screen name were included in the analyses. There were five questions that made up this scale (see Appendix 7 for scale items).

### **Treatment versus Comparison**

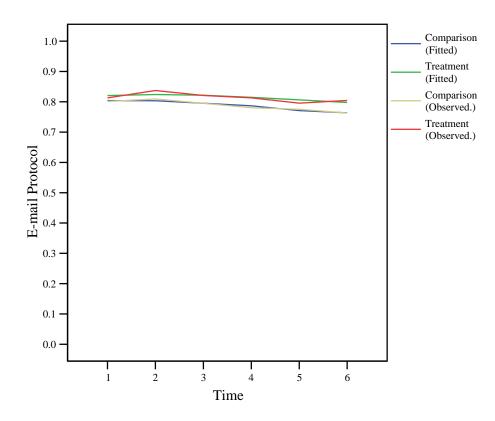
- No differences between the treatment and comparison groups at baseline: The treatment group mean was slightly higher than the comparison group mean at baseline (time 1), but the difference was not significant. The treatment group did not report risky behavior at baseline. In fact, the treatment group had correct responses 81 percent of the time, which indicated they did not include personal information when creating e-mail accounts or choosing screen names.
- No differences between treatment and comparison groups, on average: There was no statistically significant difference between the treatment group mean and the comparison group mean over the period of observation.

No difference between treatment and comparison group, over time: The mean for the treatment group increased between pretest and posttest, then decreased over subsequent periods. The mean for the comparison group remained relatively flat between pretest (time 1) and posttest (time 2), then steadily decreased over subsequent observations. Although the treatment group showed higher scores than the comparison group at the end of the study, the difference was not statistically significant.

### **Independent Variables**

■ Gender had an effect: Regardless of group membership (treatment or comparison), gender was associated with the overall average score on this scale. Boys had higher average scores than girls. In other words, boys' e-mails or usernames did not include personal information. In contrast, girls' e-mails tended to include personal information.

### **EXHIBIT IV-14: EMAIL PROTOCOL BY TIME**



## 4. RESEARCH QUESTION 3: AT WHAT REDUCED LEVELS OR INTENSITIES OF IMPLEMENTATION ARE PROGRAM BENEFITS NO LONGER MEASURABLE?

The intensity of implementation or program fidelity was measured with three variables: average number of hours of curriculum delivered, total number of youth empowerment activities, and percentage of program activities implemented. The results of the analysis are presented below.

- Average hours of curriculum: There was a relationship between the average number of hours of curriculum implemented and knowledge gained. In other words, as the average number of hours of curriculum increased, the average knowledge increased. This was found for the following scales: Internet safety, predator identification, managing risk, and sharing personal information.
- **Total number of youth empowerment activities**: There was a relationship between the total number of youth empowerment activities implemented and average knowledge of Internet safety and predator identification. In other words, as the average number of youth empowerment activities implemented increased, the average knowledge of Internet safety and predator identification increased.
- Percentage of total activities implemented: There was an inverse relationship between the percentage of total activities implemented and the average knowledge of Internet safety knowledge. In other words, the more activities implemented, the less knowledge gained.

## 5. SUMMARY

To summarize, in general, there were positive and significant differences in change in knowledge between the treatment and comparison groups, both on average and over time. The treatment group retained the knowledge over time (i.e., from time 1 to time 6). In addition, such factors as race, gender, computer skills, and parental supervision had an effect (regardless of group membership) on a number of outcomes. For the most part, there were no significant changes in behavior between the treatment and comparison groups on all scales. However, it is important to note once again that there was very little risky behavior documented at baseline. Therefore, one would not expect significant changes in behavior from pre- to posttest. This issue is explored further in the following chapter.

**V. DISCUSSION** 

# V. DISCUSSION

As one of the first research studies examining the effectiveness of Internet safety education on the knowledge and behavior of school-aged children, the findings presented here provide insight into the effectiveness of Internet safety education. In general, the evaluation findings suggest that the i-SAFE curriculum does indeed increase children's knowledge about Internet safety. On the other hand, the findings show that the curriculum is not as successful in changing Internet behavior. There are a variety of issues that might account for these findings. This chapter attempts to provide a theoretical context for the findings by discussing them in relation to both the study design and the prevention research literature. In addition, a discussion of the limitations of this study provides further information that should be considered when interpreting the findings.

This section first presents a discussion of the key findings in the knowledge domain. Next, the chapter provides a discussion of the key findings in the behavior domain. Third, the chapter discusses the intensity findings (i.e., those related to the frequency with which the program was delivered, the number of sessions and activities implemented, and knowledge and behavior). The chapter concludes with a discussion of the limitations of the study and the implications these might have for future research in this area.

## 1. KEY FINDINGS: KNOWLEDGE

The general finding here is that there was a significant increase in knowledge for the treatment group for the observation period. These findings are discussed below, as they were affected by time, grade, and several independent variables.

## 1.1 Treatment versus Comparison Over Time

For all the knowledge scales, the treatment group had significantly higher average scores than the comparison group over the 9-month period of observation. This finding is an indication that student knowledge increased as a result of their participation in the i-SAFE program. Because Internet safety curricula are relatively new, there have been few research or evaluation studies conducted to date to assess their effectiveness. In relation to the few studies that have been conducted, however, the findings prove consistent. Specifically, two Canadian studies (Crombie and Trinneer, 2003; Wilson, 2003<sup>1</sup>) found increases in children's knowledge related to participation in Internet safety education programs, although only Crombie and Trinneer implemented a quasi-experimental design. A third study, conducted in the United States, also

reported significant knowledge increases, although it is unclear what methods were used to gather data from program participants (NetSmartz, 2005). All three studies only measured short-term effects (from pretest to posttest). While there were limitations to all three of these studies, the findings do suggest a trend. That is, children who participate in Internet safety education programs are likely to increase their knowledge of Internet safety.

### **1.2** Treatment versus Comparison by Grade

For three out of the seven knowledge scales, the program was more effective for participants in lower grades than higher grades. In fact, this effect was so strong that the knowledge of the fifth graders surpassed the knowledge of the eighth graders by the end of the study. As discussed above, the i-SAFE program is grade specific, in that information is presented through activities and lectures that are tailored to the specific grade-level of the students receiving the material. This is consistent with literature that indicates that, in order to be effective, programs must be age appropriate and consistent with the knowledge level of the population targeted (Nation et al., 2003,). Given i-Safe's tailored approach, it seems unlikely that the differences presented here can be attributed to the actual curriculum materials (i.e., that they are not age- or grade-appropriate). A developmental explanation might be more appropriate. That is, perhaps younger children have had less exposure to the Internet and to Internet safety information, materials, and discussions with parents, teachers and peers than have older children. As a result, they have more to learn than their older counterparts. This explanation is supported by our focus group findings. Specifically, children in the higher grades reported that they already knew much of the information that was presented in the curriculum, but children in the lower grades did not. Children in higher grades also reported that the lessons were geared toward younger children, those without much experience using the Internet.

There is also some support for our findings from researchers in England. In analyzing the data from the pilot phase of an Internet safety curriculum, researchers found that some students benefited from the program more than did others. In response, they developed the "Internet Proficiency Scheme" (Cyberspace Research Unit, University of Central Lancashire, 2003)<sup>2</sup>. This "scheme" bases the material covered in lessons as well as the teaching strategy used on children's knowledge of the Internet *before* the program is implemented. Children are assigned to different groups based on their knowledge of Internet safety, information and communication technology experience, and the degree to which they engage in risky online behavior. The purpose of this approach is to classify students into beginner, intermediate, and advanced groups

<sup>&</sup>lt;sup>1</sup> For illustrative purposes this study is listed, but permission from author is required in order to use and cite his study.

 $<sup>^{2}</sup>$  For illustrative purposes this study is listed, but permission from author is required in order to use and cite his study.

so that lectures can be tailored to meet diverse needs. Such an approach may address our finding that students in lower grades learned more from the i-SAFE program than students in higher grades, and warrants study in future research on Internet safety programs.

### **1.3** Treatment Versus Comparison by Independent Variables

Regardless of group membership (treatment versus comparison), gender, race, and computer skills were associated with the overall average score on several of the knowledge scales. Boys had significantly lower average scores than girls on three of the seven knowledge scales and boys retained less knowledge over time for two of the seven knowledge scales. African-American and Hispanic students had significantly lower average scores than students from other races on three of the seven knowledge scales. Students who scored high on the computer skills scale also scored high on the three of the seven knowledge scales.

Because we did not test for interactions between the independent variables noted here and the treatment, it is difficult to interpret these findings in relation to the curriculum's effectiveness. Having lower than average scores does not necessarily mean that the program was less effective for those students. It is more likely that these differences are related to the characteristics (or some combination thereof) of the students themselves (e.g., culture, learning styles, exposure to concepts). For example, there is literature that has documented differences between girls and boys with relation to academic achievement (with girls performing better, overall), at least in elementary and middle school (Lee, 2000). A similar difference has been documented for minority students and students of other races (with students of other races performing better, overall) (Gertz, 1999). Girls' interests (e.g., reading) and learning style (they tolerate traditional classroom techniques, such as lecture, better than boys) have been used to explain the differences between boys and girls, while cultural factors have been shown to account for some of the differences in academic achievement among children of different races. For example, poverty has been associated with lower academic achievement, and, in general, White children are less likely to live in poverty than are minority children (Pagani, Boulerice, Vitaro, and Tremblay, 1999). As a result, White children tend to have higher academic achievement than do minority students. Because it is not clear what accounts for these differences here, it will be important to examine these issues in future studies of Internet education.

## 1.4 Knowledge and Intensity

On four of the seven scales there was a significant and positive relationship between the average number of hours the curriculum was delivered and students' average level of knowledge. This finding indicates that the more hours of the curriculum the students received, the higher their average knowledge scores over the period of observation.

Because Internet safety is an emerging field of study, there is limited information regarding how intensity (i.e., the number of hours of exposure to a curriculum) affects students' outcomes. What information there is, however, has shown a positive relationship between intensity and outcomes. That is, the more exposure children receive, the better their outcomes (Dusenbury et al., 1997; Botvin, 1996). For example, in the field of substance abuse prevention, the National Cross-site Evaluation of High-Risk Youth Program (2002) found that more intensive programs (i.e., those with 3.3 hours or more of programming per week) were better at changing alcohol and substance abuse use patterns than were less intensive programs.

Related to intensity is the number of activities that are completed during implementation of the i-SAFE curriculum. For each lesson of the curriculum, there is a menu of possible classroom activities to be implemented *during* the lesson, and a number of youth empowerment activities designed to be implemented *outside* of the 60-minute lesson. In addition to the classroom activities, a core component of the i-SAFE curriculum is the youth empowerment activities. Teachers have the option of choosing one large empowerment activity to accompany the full i-SAFE curriculum (e.g. cybersafety week), or implementing separate empowerment activities for each of the five core lessons. Examples of youth empowerment activities include presentations at faculty meetings or school assemblies about Internet safety; distributing fliers; creating brochures; displaying posters; writing newspaper articles about Internet safety; conducting lectures on Internet safety for younger children and peer groups; or inviting guest speakers to the school. The empowerment activities are designed to provide students with opportunities to apply the information they have learned in i-SAFE lessons.

It is interesting to note, that there is an inverse relationship between the percent of total activities implemented and students' average knowledge scores for the Internet safety scale. In other words, the fewer activities the students participated in, the higher their knowledge scores. While this finding may seem counterintuitive, at least initially, the findings from the teacher interviews provide some context for interpreting it. The interview data indicate that, because of time constraints, teachers often had to choose between conducting lectures or implementing hands-on activities. Because lecturing took less time than activities, teachers often chose to implement the lesson for that day, using a lecture format. While this may lead one to believe that lecture is more effective in teaching Internet safety than are activities, before interpreting this finding, we must first look at the method by which the percent of total activities was calculated.

The i-SAFE curriculum recommends that each of the lessons be accompanied by several activities. Because of time constraints, however, in all cases, teachers implemented fewer than the number of activities listed in each lesson. As such, in calculating the percentage of total activities implemented, the denominator was derived using the actual number of activities

implemented, rather than the total number recommended by i-SAFE. This was done because it was thought to better represent the number of activities implemented, in reality.

Because all of the teachers implemented fewer activities than was recommended, the activities may lose their effectiveness, overall. For example, if teachers implement only 50 percent of the recommended activities, this may be a level of implementation that is no more effective than implementing lecture alone. In effect, there may be a threshold below which the effectiveness of the activities is lost. This interpretation finds some credibility in the fidelity literature. That is, programs that are not implemented with fidelity are less effective than those that are (CSAP 2001). In addition, when programs are not implemented with fidelity, it is often difficult to predict what outcomes will result.

Finally, this relationship also can be interpreted literally. That is, that the more lecture children received, the more they learned. This, however, is counterintuitive given what we know about how children learn. Contrary to traditional teaching methods, we have known for decades that children learn better when they are taught using a combination of techniques, including some combination of formal instruction, hands-on activities, and discussion both in and outside of the classroom. Therefore, this explanation seems unlikely.

For two of the seven scales, there was a significant and positive relationship between the total number of youth empowerment activities and the average level of knowledge. In other words, children who participated in more youth empowering activities had higher average scores on the Internet safety and predator identification scales. This finding is consistent with literature that suggests that children learn better when they have opportunities to apply the knowledge they acquire. In fact, the youth empowerment activities were designed based on Bruner's constructive learning theory, which understands learning as an active process.

## 2. KEY FINDINGS: BEHAVIOR

The analysis of the online behavior measured in the study indicates that the reported behaviors of both the treatment and comparison groups were similar, at both the start and the end of the study. This finding suggests that the i-SAFE curriculum did not change participants' behavior, at least not significantly. One possible and very important explanation for this finding can be found by looking at the baseline behaviors of both groups of children. At baseline, throughout the study, and at the end at the end of study, both the treatment and the comparison groups reported very low levels of risky behavior. It is difficult to change behavior when there is little room for improvement. That is, if children had shown very high levels of risky online behavior, we would have expected the i-SAFE curriculum to have some effect on behavior, especially given what we now know about its effect on knowledge. However, given very low levels of risky behavior, there is little room for change. Therefore, behavior either remains the same or, in some cases, may get slightly better (although the differences are too small to be statistically detectable). This finding and its interpretation are consistent with a Canadian study (Crombie and Trinneer, 2003) that found students did not show significant changes in behavior, most likely because of similar low levels of risky behavior. This finding does not necessarily indicate a problem with the i-SAFE curriculum. Instead it provides an opportunity to think about how the program is implemented. Given the positive changes in students' knowledge, it makes sense to continue to implement the program. However, to change behavior, it might be necessary to target those children who are at-risk of or have demonstrated risky online behavior and teach the lessons to them as a group. Measuring their behavior pre- and post-intervention might give a better indication as to if and how the program works to change risky online behavior.

One of the more promising aspects of findings from the present study is that, for the most part, children are not engaging in risky behaviors online, which is an important finding. For those children who are, however, it is difficult to know if a program like i-SAFE can be effective in changing their behavior. Often, children who engage in risky behaviors are also those children who are having trouble in other areas. For example, they may come from impoverished and violent communities, have lower academic achievement than their peers, come from single parent families, or have mental or emotional health issues. Much of the literature about high-risk youth has recommended a multi-pronged approach to promoting behavior change—an approach that includes strategies and programs targeted not just at the child but also at his or her community, family, school, and peers (Hawkins et al., 1992). In order to change the behavior of high-risk youth, including their risky online behavior, it will be important to consider such multipronged approaches in future studies of Internet safety programs.

## 2.1 Treatment Versus Comparison by Independent Variables

Regardless of group membership (treatment versus comparison), gender and parental supervision were associated with the overall average score on some scales. Based on the scores of the four behavior scales, boys engaged in more risky behavior than girls, over the observed period. This is not that surprising, however. Literature suggests that boys are more likely to engage in risky behavior than girls (Hirschberger et al., 2002).

Students with high parental supervision had significantly lower average scores on the inappropriate online behavior scale and engaged in more discussions about Internet safety than students with low parental supervision. Here, an explanation may be as simple as this: when parents closely supervise their children, children are less likely to engage in inappropriate behavior. Again, this finding is supported in the literature, particularly the literature on juvenile delinquency. Snyder and Sickmund (1999) found that that juvenile violence peaks in the after-school hours on school days and in the evenings on non-school days, the times when parental supervision is likely to be lowest.

## 3. LIMITATIONS AND STRENGTHS OF THE STUDY

Although the quasi-experimental research design implemented was rigorous, there were two major limitations associated with the design: the lack of random assignment of schools and the lack of random selection of students.

In this study, it was not possible to randomly select schools. Instead, the team worked with the i-SAFE program office to identify schools in rural areas and small towns that might be interested in participating. We chose to target these types of schools because, according to i-SAFE data, they were thought to be representative of the schools most commonly implementing the curriculum, nationwide. Despite these efforts, however, the lack of random assignment means that the findings can only be generalized to those schools with characteristics similar to those in the study.

Random assignment of students into treatment and control conditions is the best approach for achieving comparability between groups at baseline (i.e., before program implementation). When randomization is implemented, it ensures that the only difference between the two groups is the exposure to the treatment. In this study, because random assignment was not possible, the groups were equated statistically, instead. This process had several steps. First, prior to implementation of the i-SAFE curriculum, the treatment and comparison students were tested and data were collected on key variables (contextual factors) to account for initial differences in Internet safety knowledge and online behavior. The variables included age, gender, race, grade, number of computers at home, grade when the student started using the Internet, frequency and type of online behavior, average number of hours per week of Internet use, previous knowledge of Internet safety messages, comfort level with online acquaintances, computer skills, and parental supervision. Next, these variables were incorporated into the statistical model.

One major strength of the design was its longitudinal aspect. Children were assessed over a nine-month period, with six total administrations (pretest, posttest, and four additional administrations). Conducting multiple administrations allows for a more reliable and accurate estimate of post-treatment conditions. It also allows for opportunities to assess patterns of shortterm effects.

The use of hierarchical linear modeling in the analysis also is a strength of the study. By using this technique, it was possible to take into consideration the nested nature of the data (i.e., time nested within students and students nested within classrooms). At the classroom level, the characteristics of the students (e.g., age, gender, frequency of online behavior) were incorporated into the statistical model, as were implementation characteristics (e.g., average hours of curriculum, total number of youth empowerment activities, and percentage of activities implemented). This approach allows for more robust estimations and, subsequently, models that better fit the data than would standard regression models.

### 4. SUMMARY AND RECOMMENDATIONS

One of the main findings of this evaluation is that the curriculum was effective in increasing children's knowledge of Internet safety. Moreover, there were several interesting relationships found for the knowledge outcomes. First, the evaluation found that children in lower grades (i.e., fifth grade) scored higher, on average, on some of the knowledge scales than did children in higher grades (i.e., eighth grade). Based on this finding, it might be recommended that children's knowledge of Internet safety be assessed prior to program implementation. The curriculum could then be modified to meet the needs of groups of children with different levels of knowledge. The scheme developed by researchers at the University of Lexington in England could be used as a model<sup>3</sup>. In this scheme, children are assessed prior to program implementation and then categorized as beginner, intermediate or advanced, based on their baseline knowledge of Internet safety. Children then receive one of three levels of the program, with each level of the curriculum corresponding to each category of student (i.e., beginner, intermediate, advanced).

<sup>&</sup>lt;sup>3</sup> Please note: The University of Lexington must grant permission before citing or using this scheme.

The study also found that on several knowledge scales girls had higher scores than boys, and on some scales minority students had lower scores than did students of other races<sup>4</sup>. As mentioned in the discussion section, these differences might be the result of any number of factors. Although future studies are needed to understand how these factors may affect outcomes, this study has identified important areas for program developers to consider. For example, in light of the trend in recent years to develop programs that are tailored to the developmental and cultural contexts of the youth participating in them, most importantly because these types of programs have been found to be more effective than those that do not consider culture and developmental stage, it might be useful for i-SAFE to examine its curriculum in relation to these issues. If the program is not developmentally and culturally specific, it could be modified accordingly.

The other important finding here is the one related to behavior. Specifically, while behavioral change was in the desired direction, it was not statistically significant for any of the behavior scales. Again, this does not necessarily mean that the program is not effective in changing Internet behavior. But, as with the other findings, it does warrant additional examination. Several recommendations might be considered here. First, given the low levels of risky behavior measured at baseline, to detect differences in behavior, the curriculum may need to be targeted at youth who have been identified as at-risk for inappropriate behavior or who have been caught engaging in high-risk behavior. This recommendation does not suggest, however, that the program be taught only to high-risk youth. As evidenced by the positive knowledge outcomes, even those students who are not engaging in inappropriate behavior benefit from the program. In addition, this speaks to the prevention aspect of the program. If behavior change is to be captured, however, it may only be possible by targeting those youth who exhibit inappropriate behavior prior to program implementation, and at high enough levels to be affected by the program.

The other issue related to behavior is time: behavioral change does not happen quickly, in general. While this study followed students over nine months, it may not have been a time period long enough to capture behavioral changes. In addition, some suggest that older students (i.e., high school students) are more likely to engage in inappropriate Internet behavior than are younger students. If this is the case, then students who receive the i-SAFE curriculum in the lower grades may need to be followed and re-assessed on behavioral outcomes after they reach the high school level. Although long-term follow-up is difficult logistically, and very expensive in terms of the time and labor involved, such a follow-up study may be the only way to capture behavioral change.

<sup>&</sup>lt;sup>4</sup> The minority sample was very small; therefore, this recommendation should be taken with caution.

There is also the issue of dosage. The more time children spent in the program, the more knowledge they gained. Much of the literature suggests that programs must have a strong initial dosage, and then two additional "booster" sessions in later years to maintain initial effects. It may be the case that, in its current state, the program is not intense enough to create behavioral changes, especially in light of the fact that behavior change is much more difficult to achieve than are changes in knowledge. Booster sessions of the i-SAFE curriculum might intensify the program's effects enough to produce behavioral changes.

Finally, it might also be important to consider conducting a fidelity study of the i-SAFE curriculum. In this study, the majority of the participating teachers reported that they did not have enough time to implement the program as intended. Specifically, they frequently had to exclude supplemental and youth empowerment activities to have enough time to teach the basic concepts. These are two components of the program that were designed to provide opportunities for students to apply new knowledge. Future studies could be conducted with a sample of schools that are implementing the full curriculum to determine the role fidelity plays in producing positive changes in both knowledge and behavior. In addition, varying fidelity across a sample of schools might assist i-SAFE in determining which activities are the most important in producing positive outcomes and which have minimal or no effect at all.

## 5. CONCLUSIONS

As one of the first research studies examining the effectiveness of Internet safety education on the knowledge and behavior of school-aged children, the findings presented here provide insight into the effectiveness of Internet safety education, and are a first step towards developing a knowledge base about what works in Internet safety education. According to the findings presented here, the i-SAFE curriculum does indeed increase children's knowledge about Internet safety. Its influence on behavior, however, is not very strong. In addition, there were variations in findings between, for example, girls and boys, and minority students and students from other racial groups. To continue to build on the knowledge base started here, future studies that examine these and other issues related to Internet safety education are warranted. As the Internet continues to be *the* method by which youth and young adults get information, it is imperative that researchers and curriculum providers continue to examine methods for keeping youth safe while online. REFERENCES

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APPENDIX 1: SCHOOL DEMOGRAPHICS

# APPENDIX 1: SCHOOL DEMOGRAPHICS<sup>1</sup>

## Size of School by the Grades participating in the study

Site	Grade Con		arison	Treat	Treatment	
		Ν	%	Ν	%	
Site 1	5	51	36.7	88	63.3	
	6	285	37.4	477	62.6	
	7	282	34.8	528	65.2	
	8	273	34.2	525	65.8	
Site 2	5	68	26.7	187	73.3	
	6	163	23.2	540	76.8	
	7	192	28.1	491	71.9	
	8	152	25.9	436	74.1	
Site 3	5	38	42.7	51	57.3	
	6	44	44	56	56	
	7	43	39.1	67	60.9	
Site 4	6	35	50.7	34	49.3	
	7	22	38.6	35	61.4	
	8	40	48.2	43	51.8	
Site 5	6	198	46.5	228	53.5	
	8	212	45.5	254	54.5	
Site 6	7	198	51.6	186	48.4	

<sup>&</sup>lt;sup>1</sup> These demographics were used to classify schools into treatment and comparison

Site	Grade	Gender	Comparison		Treatment		
			Ν	%	Ν	%	
Site 1	5	Female	23	45.1	49	55.7	
	5	Male	28	54.9	39	44.3	
	6	Female	125	43.9	228	47.8	
	6	Male	160	56.1	249	52.2	
	7	Female	137	48.6	241	45.6	
	7	Male	145	51.4	287	54.4	
	8	Female	140	51.3	253	48.2	
	8	Male	133	48.7	272	51.8	
Site 2	5	Female	37	54.4	107	57.2	
	5	Male	31	45.6	80	42.8	
	6	Female	70	42.9	231	42.8	
	6	Male	93	57.1	309	57.2	
	7	Female	88	45.8	225	45.8	
	7	Male	104	54.2	266	54.2	
	8	Female	80	52.6	203	46.6	
	8	Male	72	47.4	233	53.4	
Site 3	5	Female	19	50	25	49	
	5	Male	19	50	26	51	
	6	Female	24	54.5	22	39.3	
	6	Male	20	45.5	34	60.7	
	7	Female	20	46.5	30	44.8	
	7	Male	23	53.5	37	55.2	
Site 4	6	Female	15	42.9	16	47.1	
	6	Male	20	57.1	18	52.9	
	7	Female	14	63.6	17	48.6	
	7	Male	8	36.4	18	51.4	
	8	Female	22	55	26	60.5	
	8	Male	18	45	17	39.5	
Site 5	6	Female	101	51	102	44.7	
	6	Male	97	49	126	55.3	
	8	Female	111	52.4	131	51.6	
	8	Male	101	47.6	123	48.4	

# Number/Percentage Distribution of Gender by Site and Grade

## Number/Percentage Distribution of Gender by Site and Grade

Site	Grade	Gender	Compa	Comparison		Treatment		
			Ν	%	Ν	%		
Site 6	7 7	Female Male	107 91	54 46	81 105	43.5 56.5		

Site	Grade	Race	Comparison		Treatment	
			Ν	%	Ν	%
Site 1	5	African- American	0	0	0	0
	5	Caucasian	50	98	87	98.9
	5	Hispanic	1	2	0	0
	5	Other	0	0	1	1.1
	6	African- American	9	3.2	7	1.5
	6	Caucasian	272	95.4	459	96.2
	6	Hispanic	0	0	4	0.8
	6	Other	4	1.4	7	1.5
	7	African- American	7	2.5	15	2.8
	7	Caucasian	262	92.9	502	95.1
	7	Hispanic	2	0.7	4	0.8
	7	Other	11	3.9	7	1.3
	8	African- American	4	1.5	12	2.3
	8	Caucasian	263	96.3	502	95.6
	8	Hispanic	2	0.7	5	1
	8	Other	4	1.5	6	1.1
Site 2	5	African- American	25	36.8	87	46.5
	5	Caucasian	34	50	80	42.8
	5	Hispanic	3	4.4	8	4.3
	5	Other	6	8.8	12	6.4
	6	African- American	46	28.2	171	31.7
	6	Caucasian	97	59.5	309	57.2
	6	Hispanic	9	5.5	32	5.9
	6	Other	11	6.7	28	5.2
	7	African- American	59	30.7	150	30.5
	7	Caucasian	115	59.9	267	54.4
	7	Hispanic	10	5.2	38	7.7
	7	Other	8	4.2	36	7.3
	8	African- American	54	35.5	143	32.8
	8	Caucasian	81	53.3	245	56.2
	8	Hispanic	13	8.6	27	6.2
	8	Other	4	2.6	21	4.8

# Number/Percentage Distribution of Race by Site and Grade

Site Grade		Race	Comparison		Treatment	
			Ν	%	Ν	%
Site 3	5	African- American	0	0	0	0
	5	Caucasian	35	92.1	36	70.6
	5	Hispanic	3	7.9	0	0
	5	Other	0	0	15	29.4
	6	African- American	0	0	0	0
	6	Caucasian	41	93.2	41	73.2
	6	Hispanic	3	6.8	0	0
	6	Other	0	0	15	26.8
	7	African- American	0	0	0	0
	7	Caucasian	40	93	61	91
	7	Hispanic	3	7	0	0
	7	Other	0	0	6	9
Site 4	6	African- American	2	5.7	1	2.9
	6	Caucasian	11	31.4	14	41.2
	6	Hispanic	22	62.9	19	55.9
	6	Other	0	0	0	0
	7	African- American	0	0	1	2.9
	7	Caucasian	9	40.9	7	20
	7	Hispanic	13	59.1	27	77.1
	7	Other	0	0	0	0
	8	African- American	0	0	0	0
	8	Caucasian	15	37.5	12	27.9
	8	Hispanic	25	62.5	31	72.1
	8	Other	0	0	0	0
Site 5	6	African- American	19	9.6	37	16.2
	6	Caucasian	141	71.2	169	74.1
	6	Hispanic	12	6.1	5	2.2
	6	Other	26	13.1	17	7.5
	8	African- American	15	7.1	48	18.9
	8	Caucasian	159	75	176	69.3
	8	Hispanic	11	5.2	11	4.3
	8	Other	27	12.7	19	7.5

## Number/Percentage Distribution of Race by Site and Grade

Site	Grade	Race	Comparison		Treatment	
			Ν	%	Ν	%
Site 6	7	African- American	30	15.2	11	5.9
	7	Caucasian	138	70.1	141	75.8
	7	Hispanic	9	4.6	11	5.9
	7	Other	20	10.2	23	12.4

Site	Grade	Age	Comj	parison	Treat	ment
			Ν	%	N	%
Site 1	5	10	14	25.9	30	27.8
	5	11	36	66.7	61	56.5
	5	12	4	7.4	17	15.7
	6 6 6	11 12 13 14	67 205 34 1	21.8 66.8 11.1 0.3	141 316 57 2	27.3 61.2 11 0.4
	7	12	69	23.1	168	29.3
	7	13	186	62.2	338	59
	7	14	43	14.4	66	11.5
	7	15	1	0.3	1	0.2
	8	13	70	23	159	27.4
	8	14	200	65.8	352	60.6
	8	15	34	11.2	68	11.7
	8	16	0	0	2	0.3
Site 2	5	10	54	84.4	137	84
	5	11	10	15.6	26	16
	6 6 6	10 11 12 13	10 102 47 4	6.1 62.6 28.8 2.5	37 376 113 14	6.9 69.6 20.9 2.6
	7	11	10	5.5	40	8.2
	7	12	105	57.7	315	64.4
	7	13	54	29.7	125	25.6
	7	14	12	6.6	9	1.8
	7	15	1	0.5	0	0
	8	12	13	8.8	31	7.3
	8	13	87	58.8	279	65.6
	8	14	42	28.4	106	24.9
	8	15	6	4.1	9	2.1
Site 3	5	10	15	39.5	15	29.4
	5	11	23	60.5	35	68.6
	5	12	0	0	1	2
	6	11	13	29.5	16	28.6
	6	12	30	68.2	38	67.9
	6	13	1	2.3	2	3.6
_	7	12	15	34.9	19	28.4
	7	13	26	60.5	45	67.2

## Number/Percentage Distribution of Age by Site and Grade

Site	ite Grade Age Comparison		parison	on Treatment		
			Ν	%	Ν	%
Site 3	7	14	1	2.3	3	4.5
(cont'd)	7	15	1	2.3	0	0
Site 4	6	11	12	34.3	17	50
	6	12	20	57.1	14	41.2
	6	13	3	8.6	3	8.8
	7	12	6	27.3	10	28.6
	7	13	16	72.7	23	65.7
	7	14	0	0	2	5.7
	8	13	17	42.5	18	41.9
	8	14	22	55	24	55.8
	8	15	1	2.5	1	2.3
Site 5	6	11	25	12.6	62	27.2
	6	12	138	69.7	154	67.5
	6	13	35	17.7	12	5.3
	8	13	30	14.2	65	25.6
	8	14	134	63.2	173	68.1
	8	15	47	22.2	15	5.9
	8	16	0	0	1	0.4
	8	17	1	0.5	0	0
Site 6	7	11	1	0.5	0	0
	7	12	28	14.1	28	15.1
	7	13	131	66.2	124	66.7
	7	14	38	19.2	33	17.7
	7	15	0	0	1	0.5

## Number/Percentage Distribution of Age by Site and Grade

Site	Grade	Lunch Assistance	Com	parison	Treat	ment
			Ν	%	Ν	%
Site 1	5	Lunch Free	14	63.6	34	77.3
	5	Lunch Reduced	8	36.4	10	22.7
	6	Lunch Free	89	84	157	76.2
	6	Lunch Reduced	17	16	49	23.8
	7	Lunch Free	86	85.1	167	73.2
	7	Lunch Reduced	15	14.9	61	26.8
	8	Lunch Free	61	68.5	140	73.3
	8	Lunch Reduced	28	31.5	51	26.7
Site 2	5	Lunch Free	30	43.5	95	51.6
	5	Lunch Paid	35	50.7	74	40.2
	5	Lunch Reduced	4	5.8	15	8.2
	6	Lunch Free	95	58.3	242	44.8
	6	Lunch Paid	55	33.7	268	49.6
	6	Lunch Reduced	13	8	30	5.6
	7	Lunch Free	102	56	227	46.4
	7	Lunch Paid	63	34.6	221	45.2
	7	Lunch Reduced	17	9.3	41	8.4
	8	Lunch Free	75	50.7	205	48.2
	8	Lunch Paid	57	38.5	193	45.4
	8	Lunch Reduced	16	10.8	27	6.4
Site 3	5 5 6 6	Lunch Free Lunch Paid Lunch Reduced Lunch Free Lunch Paid Lunch Reduced	9 22 7 11 24 9	23.7 57.9 18.4 25 54.5 20.5	16 0 8 16 0 4	66.7 0 33.3 80 0 20
	7	Lunch Free	7	16.3	16	80
	7	Lunch Paid	28	65.1	0	0
	7	Lunch Reduced	8	18.6	4	20
Site 4	6	Combined Free	20	60.6	22	64.7
	6	and Reduced Lunch Paid	13	39.4	12	35.3
	7	Combined Free and Reduced	14	63.6	29	82.9
	7	Lunch Paid	8	36.4	6	17.1

# Number/Percentage Distribution of Lunch Assistance by Site and Grade

Site	Grade	Lunch Assistance	Comparison		Treatment	
			Ν	%	Ν	%
Site 4	8	Combined Free and Reduced	27	67.5	33	76.7
(cont'd)	8	Lunch Paid	13	32.5	10	23.3
Site 5	6 6	Lunch Free Lunch Reduced	61 13	82.4 17.6	17 7	70.8 29.2
	8 8	Lunch Free Lunch Reduced	58 16	78.4 21.6	32 9	78 22
Site 6	7 7	Lunch Free Lunch Reduced	67 17	79.8 20.2	64 15	81 19

## Number/Percentage Distribution of Lunch Assistance by Site and Grade

APPENDIX 2: CONSENT AND ASSENT FORMS

## **APPENDIX 2: CONSENT AND ASSENT FORMS**

### PARENT/GUARDIAN CONSENT LETTER FOR i-SAFE SCHOOLS

#### Dear Parent/Guardian:

Your child and his/her classroom will be taught an Internet safety curriculum called i-SAFE in the upcoming weeks. The program includes five lessons that teach children how to use the Internet safely. We would like to include your child, along with his or her classmates, in an evaluation of the i-SAFE program. Caliber Associates, a private research company, is conducting the study of the i-SAFE Program for the federal government. In our evaluation, we are including children who attend schools that provide the i-SAFE program and those that currently do not provide the program, but may decide to offer it in the future. Our evaluation will lead to a better understanding of the effectiveness of the i-SAFE program in teaching Internet safety to children. In the paragraphs below we summarize the evaluation and how we will maintain your child's confidentiality.

### Procedures

Survey:

With your consent, your child will be asked to complete a survey that will ask about his/her Internet use (e.g., "How often do you get on e-mail?"). Participation in the survey will be completely voluntary. Your child will be asked to complete the survey six times over the next 10 months.

### Group Discussion:

With your consent, your child may also be asked to participate in a group discussion with our evaluators about the i-SAFE program and children's Internet use. Participation in the group discussion is completely voluntary and your child will have the right not to answer any or all questions. The discussion will be audio taped by the designated Caliber research staff, and the tapes will be securely handled so that nobody at your child's school will have access to the tapes.

You are free to withdraw your permission for your child's participation in the evaluation at any time and for any reason without penalty. There is no penalty for not participating in the evaluation.

### Confidentiality

Information obtained as part of this evaluation will be strictly confidential. Your child's name will not appear on any forms. All forms will contain a confidential ID-code number that will be used to link your child's responses to the surveys he or she will complete. A record of the code numbers and names will be kept in a locked file at Caliber Associates to which only the researchers doing the evaluation will have access. Individual records, including notes and audiotapes, will not be released to others. Although we cannot guarantee that participants in the group discussions will keep the information they heard during the sessions confidential, the participants will be asked not to disclose anything they heard during the discussions after they are over. The information gathered will be used for research purposes only.

### **Benefits and Risks**

The results of this research will add to our knowledge base about what works in keeping children safe while using the Internet and may inform policies related to Internet safety programs. Although your child will receive no *direct* benefit from the evaluation, he or she may enjoy participating in evaluation activities or take pride in being involved in a research study that is helping us to understand how to keep children safe on the Internet.

While the research team is taking steps to secure your child's confidentiality, as outlined above, we do not have control over every situation that might occur. For example, the possibility exists that, in collecting

completed surveys, a teacher may inadvertently see some of your child's responses or that your child might disclose on the survey or during focus groups that they have been involved with illegal Internet activity (although the risk of either of these events is minimal). If a teacher is exposed to your child's responses, they will be required to keep the information confidential. If your child discloses involvement in illegal Internet (or other) activity, however, the research team may be obligated to report that information to the appropriate school personnel who would then decide what, if any, action should be taken.

In closing, we hope that you share our enthusiasm about this project by allowing your child to participate. If you have any questions, please contact Dr. Madeleine Wallace from Caliber Associates, Inc. by e-mail, <u>mwallace@caliber.com</u>, or telephone 703-385-3200. You may also contact Dr. Maureen Murphy from the Caliber Institutional Review Board (IRB) at 703-385-3200 or <u>mmurphy@caliber.com</u>.

Sincerely,

Madeleine Wallace, Ph.D. Senior Associate

I have read and understand the information about the evaluation of i-SAFE. I understand that by giving my consent my child will be asked to complete a survey several times this year and may be asked to participate in a group discussion that will be audio taped. I understand that my child can stop participating in the evaluation at any time without penalty. All information my child provides will remain confidential and will not be made available to any one other than the research staff.

Please check the box below, fill in the name information, sign, and have your child return it to the teacher.

I hereby:

give my consent for my child to participate in the National Evaluation of the i-SAFE Curriculum.

do not give my consent for my child to participate in the National Evaluation of the i-SAFE Curriculum

### **Please Print**

Parent/Guardian Name \_\_\_\_\_

Child Name \_\_\_\_\_

Date \_\_\_\_\_

Signature of Parent/Guardian \_\_\_\_\_

## EL PERMISO DEL PADRE O EL APODERADO PARA QUE EL NIÑO PARTICIPE EN LA INVESTIGACIÓN

Señor padre o apoderado:

En las siguientes semanas el programa de i-SAFE se les va a enseñar a su niño y a los otros niños de su escuela. Este programa consiste en cinco lecciones acerca de como usar la Internet en forma segura. Nos gustaría que su niño junto con los demás niños de su clase participen en la evaluación del programa de i-SAFE. Caliber Associates que es una firma privada esta llevando a cabo esta investigación con fondos federales para reunir información con respecto a las experiencias de su niño con el programa. Para evaluar los resultados del programa Caliber Associates esta incluyendo niños que van a escuelas donde el programa se enseña y escuelas donde el programa todavía no se implementa. . Esta investigación nos ayudará a entender los beneficios del programa. Este formulario le da a usted información detallada acerca de la investigación para que Ud. otorgue permiso para que su niño participe en la investigación.

### LA DESCRIPCION DE PROCEDIMIENTOS

### Cuestionario:

Con su permiso se le pedirá a su niño que llene un cuestionario acerca de su uso en la Internet. Por ejemplo, se le preguntará – Cuantas veces su niño usa correo electrónico?. La participación de su niño en la investigación es completamente voluntaria. A su niño se le pedirá que llene el cuestionario 6 veces durante el año escolar.

#### Grupo de Discusion:

Con su permiso se le puede pedir a su niño que participe en un grupo de discusión con miembros del equipo de investigación. En estas discusiones se les preguntará a los niños que hacen en la Internet. La participación de su niño en la investigación es completamente voluntaria y su niño no tiene que responder a todas las preguntas. Las discusiones serán grabadas por los miembros del equipo de investigación y nadie en la escuela tendrá acceso a ellas.

Ud. puede pedir en cualquier momento que su niño no continue en la investigación. No hay penalidades por no participar en la investigación.

### LA CONFIDENCIALIDAD

La información que su niño proporcionará en esta investigación será confidencial. Esto significa que los miembros del equipo de investigación no revelaremos la información que su niño nos de a nadie que no este implicado con el estudio. Hay varias maneras de mantener la confidencialidad de la información proporcionada por su niño: (1) nosotros pondremos la información bajo un número de identificación, no se registrará su nombre; (2) mantendremos la información de su niño en un gabinete cerrado que sólo nuestro equipo de investigación puede abrir; (3) el cuestionario y las grabaciones de las discusiones con los niños no se daran a conocer a personas fuera del equipo de investigación; (4) los niños que participen en las discusiones se les pedirá que no revelen el contenido de las discusiones. La información sólo se usará para fines de la investigación.

### LOS BENEFICIOS A SU NIÑO

El propósito de esta investigación es evaluar los resultados asociados con la participación en el programa de i-SAFE. Esta investigación nos ayudará a entender los beneficios del programa. Aunque su niño no recibirá directamente los beneficios de la investigación, su niño puede disfrutar de los cuestionarios y discusiones que son parte de la evaluación. Además su niño puede sentirse orgulloso de participar en un estudio que va a ayudar a identificar como proteger los niños en la Internet.

Como lo hemos indicado nosotros estamos tomando muchas precauciones para proteger la confidencialidad de su niño. Sin embargo, puede suceder que cuando su niño este llenando el cuestionario, alguien puede mirar sus respuestas. También puede suceder que su niño indique en el cuestionario o en las discusiones de grupo que esta envuelto en actividades ilegales o nocivas en la Internet. El riesgo que estos incidentes sucedan son mínimos. Si un profesor mira las respuestas de su niño se le pedirá que mantenga la información confidencial. Sin embargo, si hay actividades ilegales, el grupo de investigación se verá obligado a reportar la información a la escuela y la escuela decidirá como proceder, priorizando la protección de su niño.

\_\_\_\_\_

Esperamos que Ud. comparta nuestro entusiasmo en este importante proyecto de investigación y permita que su niño participe. Si Ud. tiene preguntas, por favor contacte a Dr. Madeleine Wallace de Caliber Associates, Inc. al teléfono (703) 219-4355 o mande e-mail a <u>mwallace@caliber.com</u>. Ud. también puede contactar Dr. Maureen Murphy al teléfono (703) 385-3200 or mande e-mail a <u>mmurphy@caliber.com</u>.

Sinceramente,

Madeleine Wallace, Ph. D. Senior Associate

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He leído (o alguien me ha leído a mí) este formulario y he entendido el propósito de la investigación. Entiendo que si otorgo permiso a mi niño a participar en la evaluación del programa i-SAFE, mi niño llenará cuestionarios y probablemente se le pedirá que participe en grupos de discusión que va ha ser grabada. Entiendo que mi niño puede dejar de participar en cualquier momento sin penalidades. Toda la información que mi niño va a proveer es confidencial y sólo el grupo de investigación va a tener acceso a ella.

Por favor indique si da su consentimiento. Para lo cual llene la información requerida, y entregue este formulario a su niño para que el lo devuelva a la escuela

Doy consentimiento para que mi niño participe en la investigación sobre el programa de i-SAFE.

No Doy consentimiento para que mi niño participe en la investigación sobre el programa de i-SAFE.

Escriba el Nombre del Padre o Apoderado:

Nombre del Niño \_\_\_\_\_

La firma del Padre o Apoderado:\_\_\_\_\_\_Fecha\_\_\_\_\_

## PARENT/GUARDIAN CONSENT LETTER FOR COMPARISON SCHOOLS

Dear Parent/Guardian:

We would like to include your child, along with his or her classmates, in an evaluation of an Internet safety program called i-SAFE. Caliber Associates, a private research company, is conducting the study of the i-SAFE Program for the federal government. In our evaluation, we are including children who attend schools that provide the i-SAFE program and those that currently do not provide the program, but may decide to offer it in the future. Our evaluation will lead to a better understanding of the effectiveness of the i-SAFE program in teaching Internet safety to children. In the paragraphs below we summarize the evaluation and how we will maintain your child's confidentiality.

### Procedures

Survey:

With your consent, your child will be asked to complete a survey that will ask about his/her Internet use (e.g., "How often do you get on e-mail?"). Participation in the survey will be completely voluntary. Your child will be asked to complete the survey six times over the next 10 months.

### Group Discussion:

With your consent, your child may also be asked to participate in a group discussion with our evaluators about the i-SAFE program and children's Internet use. Participation in the group discussion is completely voluntary and your child will have the right not to answer any or all questions. The discussion will be audio taped by the designated Caliber research staff, and the tapes will be securely handled so that nobody at your child's school will have access to the tapes.

You are free to withdraw your permission for your child's participation in the evaluation at any time and for any reason without penalty. There is no penalty for not participating in the evaluation.

### Confidentiality

Information obtained as part of this evaluation will be strictly confidential. Your child's name will not appear on any forms. All forms will contain a confidential ID-code number that will be used to link your child's responses to the surveys he or she will complete. A record of the code numbers and names will be kept in a locked file at Caliber Associates to which only the researchers doing the evaluation will have access. Individual records, including notes and audiotapes, will not be released to others. Although we cannot guarantee that participants in the group discussions will keep the information they heard during the sessions confidential, the participants will be asked not to disclose anything they heard during the discussions after they are over. The information gathered will be used for research purposes only.

### **Benefits and Risks**

The results of this research will add to our knowledge base about what works in keeping children safe while using the Internet and may inform policies related to Internet safety programs. Although your child will receive no *direct* benefit from the evaluation, he or she may enjoy participating in evaluation activities or take pride in being involved in a research study that is helping us to understand how to keep children safe on the Internet.

While the research team is taking steps to secure your child's confidentiality, as outlined above, we do not have control over every situation that might occur. For example, the possibility exists that, in collecting completed surveys, a teacher may inadvertently see some of your child's responses or that your child might disclose on the survey or during focus groups that they have been involved with illegal Internet activity (although the risk of either of these events is minimal). If a teacher is exposed to your child's responses, they will be required to keep the information confidential. If your child discloses involvement

in illegal Internet (or other) activity, however, the research team may be obligated to report that information to the appropriate school personnel who would then decide what, if any, action should be taken.

In closing, we hope that you share our enthusiasm about this project by allowing your child to participate. If you have any questions, please contact Dr. Madeleine Wallace from Caliber Associates, Inc. by e-mail, <u>mwallace@caliber.com</u>, or telephone 703-385-3200. You may also contact Dr. Maureen Murphy from the Caliber Institutional Review Board (IRB) at 703-385-3200 or <u>mmurphy@caliber.com</u>.

Sincerely,

Madeleine Wallace, Ph.D. Senior Associate

I have read and understand the information about the evaluation of i-SAFE. I understand that by giving my consent my child will be asked to complete a survey several times this year and next year and may be asked to participate in a group discussion that will be audio taped. I understand that my child can stop participating in the evaluation at any time without penalty. All information my child provides will remain confidential and will not be made available to any one other than the research staff.

Please check the box below, fill in the name information, sign, and have your child return it to the teacher.

I hereby:

give my consent for my child to participate in the National Evaluation of the i-SAFE Curriculum.

do not give my consent for my child to participate in the National Evaluation of the i-SAFE Curriculum

### **Please Print**

Child Name \_\_\_\_\_

Date
------

Signature of Parent/Guardian \_\_\_\_\_

## EL PERMISO DEL PADRE O EL APODERADO PARA QUE EL NIÑO PARTICIPE EN LA INVESTIGACIÓN

Señor padre o apoderado:

Caliber Associates que es una firma privada esta llevando a cabo esta investigación con fondos federales para reunir información con respecto a las experiencias de su niño con el programa. Para evaluar los resultados del programa Caliber Associates esta incluyendo niños que van a escuelas donde el programa se enseña y escuelas donde el programa todavía no se implementa. Esta investigación nos ayudará a entender los beneficios del programa. Este formulario le da a usted información detallada acerca de la investigación para que Ud. otorgue permiso para que su niño participe en la investigación.

#### LA DESCRIPCION DE PROCEDIMIENTOS

#### Cuestionario:

Con su permiso se le pedirá a su niño que llene un cuestionario acerca de su uso en la Internet. Por ejemplo, se le preguntará – Cuantas veces su niño usa correo electrónico?. La participación de su niño en la investigación es completamente voluntaria. A su niño se le pedirá que llene el cuestionario 6 veces durante el año escolar.

#### Grupo de Discusion:

Con su permiso se le puede pedir a su niño que participe en un grupo de discusión con miembros del equipo de investigación. En estas discusiones se les preguntará a los niños que hacen en la Internet. La participación de su niño en la investigación es completamente voluntaria y su niño no tiene que responder a todas las preguntas. Las discusiones serán grabadas por los miembros del equipo de investigación y nadie en la escuela tendrá acceso a ellas.

Ud. puede pedir en cualquier momento que su niño no continue en la investigación. No hay penalidades por no participar en la investigación.

#### LA CONFIDENCIALIDAD

La información que su niño proporcionará en esta investigación será confidencial. Esto significa que los miembros del equipo de investigación no revelaremos la información que su niño nos de a nadie que no este implicado con el estudio. Hay varias maneras de mantener la confidencialidad de la información proporcionada por su niño: (1) nosotros pondremos la información bajo un número de identificación, no se registrará su nombre; (2) mantendremos la información de su niño en un gabinete cerrado que sólo nuestro equipo de investigación puede abrir; (3) el cuestionario y las grabaciones de las discusiones con los niños no se daran a conocer a personas fuera del equipo de investigación; (4) los niños que participen en las discusiones se les pedirá que no revelen el contenido de las discusiones. La información sólo se usará para fines de la investigación.

#### LOS BENEFICIOS A SU NIÑO

El propósito de esta investigación es evaluar los resultados asociados con la participación en el programa de i-SAFE. Esta investigación nos ayudará a entender los beneficios del programa. Aunque su niño no recibirá directamente los beneficios de la investigación, su niño puede disfrutar de los cuestionarios y discusiones que son parte de la evaluación. Además su niño puede sentirse orgulloso de participar en un estudio que va a ayudar a identificar como proteger los niños en la Internet.

Como lo hemos indicado nosotros estamos tomando muchas precauciones para proteger la confidencialidad de su niño. Sin embargo, puede suceder que cuando su niño este llenando el cuestionario, alguien puede mirar sus respuestas. También puede suceder que su niño indique en el cuestionario o en las discusiones de grupo que esta envuelto en actividades ilegales o nocivas en la

Internet. El riesgo que estos incidentes sucedan son mínimos. Si un profesor mira las respuestas de su niño se le pedirá que mantenga la información confidencial. Sin embargo, si hay actividades ilegales, el grupo de investigación se verá obligado a reportar la información a la escuela y la escuela decidirá como proceder, priorizando la protección de su niño.

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Esperamos que Ud. comparta nuestro entusiasmo en este importante proyecto de investigación y permita que su niño participe. Si Ud. tiene preguntas, por favor contacte a Dr. Madeleine Wallace de Caliber Associates, Inc. al teléfono (703) 219-4355 o mande e-mail a <u>mwallace@caliber.com</u>. Ud. también puede contactar Dr. Maureen Murphy al teléfono (703) 385-3200 or mande e-mail a <u>mmurphy@caliber.com</u>.

Sinceramente,

Madeleine Wallace, Ph. D. Senior Associate

.....

He leído (o alguien me ha leído a mí) este formulario y he entendido el propósito de la investigación. Entiendo que si otorgo permiso a mi niño a participar en la evaluación del programa i-SAFE, mi niño llenará cuestionarios y probablemente se le pedirá que participe en grupos de discusión que va ha ser grabada. Entiendo que mi niño puede dejar de participar en cualquier momento sin penalidades. Toda la información que mi niño va a proveer es confidencial y sólo el grupo de investigación va a tener acceso a ella.

Por favor indique si da su consentimiento. Para lo cual llene la información requerida, y entregue este formulario a su niño para que el lo devuelva a la escuela

Doy consentimiento para que mi niño participe en la investigación sobre el programa de i-SAFE.

No Doy consentimiento para que mi niño participe en la investigación sobre el programa de i-SAFE.

Escriba el Nombre del Padre o Apoderado: \_\_\_\_\_

Nombre del Niño \_\_\_\_\_

La firma del Padre o Apoderado:\_\_\_\_\_\_Fecha\_\_\_\_\_

#### STUDENT INFORMED ASSENT

Your school has agreed to take part in an evaluation of the I-SAFE program. The I-SAFE program teaches students about Internet Safety. Caliber Associates, a private research company, is conducting the study of the i-SAFE Program for the federal government.

Caliber is asking you to help with their study by doing two activities:

- 1. *Fill out a survey every 2 months.* This survey asks questions about Internet safety. It also asks about what kinds of things young people do while surfing the Internet. You will be asked to fill out the survey six times.
- 2. *Participate in discussions with Caliber Associates staff.* Caliber Associates staff will randomly pick ten students from your classroom to talk about Internet safety and what young people do while surfing the Internet.

To protect your privacy, your name will not be shown on the survey. Caliber will keep your private information (name, comments during the focus groups, answers to the survey) locked in their office in Fairfax, VA. The researchers will not tell your teachers, parents/guardians, principal, or friends what you say. At the end of the study, they will combine everything students say from all of the schools. Then they will write a report. The report will tell what students your age know about Internet safety. It will also say what students your age like to do when they are on the Internet.

It is important that you feel comfortable answering the questions honestly. You do not have to answer any questions that you do not want to. You can stop being part of the study at any time.

Caliber will use your answers to understand how to keep children safe on the Internet. Your answers may also help to create laws related to Internet Safety.

Does anyone have any questions? If you understand everything I just explained and would like to participate in this study, please sign your name on the form.

I agree to participate in the evaluation of the I-SAFE program. I understand that I do not have to answer any questions that I do not want to. I understand that I can stop participating in the evaluation at any time.

Name:	School:	

Signature:\_\_\_\_\_ Date: \_\_\_\_\_

## CONSENT FOR PRINCIPAL PARTICIPATION IN INTERVIEWS

We would like to include you in an evaluation of an Internet safety program called i-SAFE. Caliber Associates, a private research company, is conducting the study of the i-SAFE Program for the federal government. In our evaluation, we are including schools that provide the i-SAFE program and those that currently do not provide the program, but may decide to offer it in the future. Our evaluation will lead to a better understanding of the effectiveness of the i-SAFE program. In the paragraphs below we summarize the procedures of the evaluation, how we will maintain your confidentiality, and the risks and benefits involved in the evaluation.

**Procedures:** You are being asked to participate in a 45-minute to one-hour discussion with project staff. Additionally, future follow-up data collection efforts are planned and you will likely be contacted again in the future to participate in another discussion. Handwritten notes and a tape recorder will be used to record your answers. The discussion will center on Internet use and the i-SAFE program. Participation in the discussion will be completely voluntary. You have the right not to answer any or all questions.

**Confidentiality:** Information obtained as part of this evaluation will be strictly confidential. Your name will not appear on any form. A special code number will be used to identify your participation in the discussion. A record of the code numbers and names will be kept in a locked file at Caliber Associates, Inc., to which only the researchers doing the evaluation will have access. Records, including notes and audiotapes, will not be released to others. The information gathered will be used for scientific purposes only.

**Risks**: Several measures will be taken to secure your confidentiality in this evaluation, as indicated in the section above. There are minimal risks to participation in this evaluation, but a lack of confidentiality could result in potential minor risks to you.

**Benefits**: The results of this research will inform policies related to Internet safety programs for children. Although you will receive no *direct* benefit from the evaluation, your help will be greatly appreciated and will add to our knowledge base about what works in keeping children safe while using the Internet.

If you have any questions about this evaluation, please contact Dr. Madeleine Wallace from Caliber Associates, Inc. by e-mail, wallacem@calib.com, or telephone 703-385-3200. Dr. Maureen Murphy from Caliber Institutional Review Board (IRB) can be reached at 703- 385-3200 or <u>mmurphy@caliber.com</u>.

I understand that I have been asked to participate in a discussion that will be audio taped and that I can stop participating at any time without penalty. All information I provide will remain confidential. I agree to participate in this discussion.

Signature of Participant

Date

Signature of Project Staff Member

Date

In closing, we hope that you share our enthusiasm about this project by allowing your child to participate. If you have any questions, please contact Dr. Madeleine Wallace from Caliber Associates, Inc. by e-mail, <u>mwallace@caliber.com</u>, or telephone 703-385-3200. You may also contact Dr. Maureen Murphy from the Caliber Institutional Review Board (IRB) at 703-385-3200 or <u>mmurphy@caliber.com</u>.

Sincerely,

Madeleine Wallace, Ph.D. Senior Associate

I have read and understand the information about the evaluation of i-SAFE. I understand that by giving my consent my child will be asked to complete a survey several times this year and may be asked to participate in a group discussion that will be audio taped. I understand that my child can stop participating in the evaluation at any time without penalty. All information my child provides will remain confidential and will not be made available to any one other than the research staff.

Please check the box below, fill in the name information, sign, and have your child return it to the teacher.

I hereby:

give my consent for my child to participate in the National Evaluation of the i-SAFE Curriculum.

do not give my consent for my child to participate in the National Evaluation of the i-SAFE Curriculum

#### **Please Print**

Parent/Guardian Name	
Child Name	
Date	
Signature of Parent/Guardian	

## CONSENT FOR TEACHER PARTICIPATION IN SURVEY AND INTERVIEWS

We would like to include you in an evaluation of an Internet safety program called i-SAFE. Caliber Associates, a private research company, is conducting the study of the i-SAFE Program for the federal government. In our evaluation, we are including schools that provide the i-SAFE program and those that currently do not provide the program, but may decide to offer it in the future. Our evaluation will lead to a better understanding of the effectiveness of the i-SAFE program. In the paragraphs below we summarize the procedures of the evaluation, how we will maintain your confidentiality, and the risks and benefits involved in the evaluation.

**Procedures:** You are being asked to participate in a survey and discussions with project staff. Additionally, future follow-up data collection efforts are planned and you will likely be contacted again in the future to participate in a survey or focus group. Handwritten notes and a tape recorder will be used to record your answers. The discussion will center on Internet use and the i-SAFE program. Participation in the discussion will be completely voluntary. You have the right not to answer any or all questions.

**Confidentiality:** Information obtained as part of this evaluation will be strictly confidential. Your name will not appear on any form. A special code number will be used to identify your participation in the discussion. A record of the code numbers and names will be kept in a locked file at Caliber Associates, Inc., to which only the researchers doing the evaluation will have access. Records, including notes and audiotapes, will not be released to others. Although we cannot guarantee that participants in the group discussions will keep the information heard during the sessions private, we ask that you not to disclose anything you hear during the discussions after they are over. The information gathered will be used for scientific purposes only. Information obtained during the interviews and focus groups will not be shared with the principal of your school and will not be used in any form of personnel evaluation.

**Risks**: Several measures will be taken to secure your confidentiality in this evaluation, as indicated in the section above. There are minimal risks to participation in this evaluation, but a lack of confidentiality could result in potential minor risks to you.

**Benefits**: The results of this research will inform policies related to Internet safety programs for children. Although you will receive no *direct* benefit from the evaluation, your participation may assist you when implementing the i-SAFE curriculum in the future. Your help will be greatly appreciated and will add to our knowledge base about what works in keeping children safe while using the Internet.

If you have any questions about this evaluation, please contact Dr. Madeleine Wallace from Caliber Associates, Inc. by e-mail, wallacem@calib.com, or telephone 703-385-3200. Dr. Maureen Murphy from Caliber Institutional Review Board (IRB) can be reached at 703- 385-3200 or <u>mmurphy@caliber.com</u>.

I understand that I have been asked to participate in a discussion that will be audio taped and that I can stop participating at any time without penalty. All information I provide will remain confidential. I agree to participate in this discussion and complete the survey.

Signature	of	Parti	cipant
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Date

Signature of Project Staff Member

Date

APPENDIX 3: ACCEPTABLE USE POLICY COMPONENTS BY SCHOOL AND DISTRICT

APPENDIX 3:													
Ассерта	ACCEPTABLE USE POLICY COMPONENTS BY SCHOOL AND DISTRICT												
	District #1 Policy – applies to all District schools in addition to individual school policies	District #1/Middle School #1 (Crawford)	District #1/Middle School #2 (Haves)	District #1/Middle School #3 (Winburn)	District #1/ Elementary School #1 (Northern)	District #1/ Elementary School #2 (JR Ewan)	District #1/ Elementary School #3 (Linelee)	District #2 Policy – used by all schools in district (Daviess)	District #3 – used by all schools in the district (Norman)	District #4 – used by all schools in the district (Edmond)	District #5 – used by all schools in district (Lexington)	District #6 – used by all schools in district (Centura)	District #7- used by all schools in district (St.Paul)
Identifies use of technology as a privilege and not a right/ indicates that violation of the acceptable use policy may subject the individual to discipline according to school/district policy. The policy may also address malicious activity and vandalism (e.g. hacking).	Х	X	X	X	X	Х	X	X	X	X	X	X	X
Indicates that technology should be used for educational purposes only and may outline prohibited uses of the technology (e.g. spamming).	Х	Х	Х		Х	Х	X	Х	X	X	X	Х	х
Prohibits sharing of usernames and passwords with each user being fully responsible for any activity that occurs under their username	Х	X	х	X	X		X	X	X	X	X	X	
Outlines rules for the installation of software on school computing systems		Х	X		X	Х	X	X					X

# **APPENDIX 3: ACCEPTABLE USE POLICY COMPONENTS BY SCHOOL AND DISTRICT**

Ассерта	BLE USE	Polic		PPEND MPON		BY SCI	HOOL	AND E	DISTRIG	CT			
	District #1 Policy – applies to all District schools in addition to individual school policies	District #1/Middle School #1 (Crawford)	District #1/Middle School #2 (Haves)	District #1/Middle School #3 (Winburn)	District #1/ Elementary School #1 (Northern)	District #1/ Elementary School #2 (JR Ewan)	District #1/ Elementary School #3 (Linelee)	District #2 Policy – used by all schools in district (Daviess)	District #3 – used by all schools in the district (Norman)	District #4 – used by all schools in the district (Edmond)	District #5 – used by all schools in district (Lexington)	District #6 – used by all schools in district (Centura)	District #7- used by all schools in district (St.Paul)
Addresses liability issues and/or indicates that all users should fully cooperate with any investigation into illegal activity	X							X	X	X	X		
Illustrates that all technology is the property of the school/or district and that all usage, including personal files on District computing systems, may be monitored. Some policies also address the limits of the school's monitoring technology (e.g. cannot monitor student personal e-mail accounts such as Yahoo, AOL, or Hotmail).	X	Х	Х	х	Х	Х	Х	X		X	X		x
Indicates that while the district or school makes the effort to filter access to inappropriate material on the Internet and monitor student usage, there is no guarantee that a student will not encounter questionable material.	X	X	Х	X				X	X	X			X

Appendix 3

APPENDIX 3: ACCEPTABLE USE POLICY COMPONENTS BY SCHOOL AND DISTRICT													
	District #1 Policy – applies to all District schools in addition to individual school policies	District #1/Middle School #1 (Crawford)	District #1/Middle School #2 (Haves)	District #1/Middle School #3 (Winburn)	District #1/ Elementary School #1 (Northern)	District #1/ Elementary School #2 (JR Ewan)	District #1/ Elementary School #3 (Linelee)	District #2 Policy – used by all schools in district (Daviess)	District #3 – used by all schools in the district (Norman)	District #4 – used by all schools in the district (Edmond)	District #5 – used by all schools in district (Lexington)	District #6 – used by all schools in district (Centura)	District #7- used by all schools in district (St.Paul)
Addresses copyright policies for the use of technology and prohibits accessing files or material that belongs to another user.	X	X	X	X	X			X		X	X	Х	x
Indicates that any cost incurred by a user is the sole responsibility of the user (e.g. long distance charges).					X			X	X				

APPENDIX 4: SAMPLE FIDELITY CHECKLIST FOR INSTRUCTORS GRADE 7 LESSON 2

## **APPENDIX 4:**

#### SAMPLE FIDELITY CHECKLIST FOR INSTRUCTORS GRADE 7 LESSON 2

School name:	Teacher na	ame:					
Name of student group:	Number	of stud	ents en	rolled ir	n class	:	
Circle the grade level(s) of the students in this	class:	4	5	6	7	8	
Date lesson administered:	Date forn	n comp	leted:				

<u>Note to Instructor</u>: To help us understand the details of lesson delivery in each i-SAFE classroom, we request that you please complete a fidelity checklist for each lesson you administer (the grade and lesson numbers are shown at the top of each form). Please complete the checklist as soon as possible after administering each i-SAFE lesson. The sooner you complete the checklist after administering the lesson, the more reliable your information will be for evaluation purposes. If you teach i-SAFE during more than one class period, please complete a separate checklist for each i-SAFE class period, even if you feel that all of your answers are identical. If you have any questions about the checklist, please contact Christine Leicht: <u>cleicht@caliber.com</u> or (703) 219-4302.

### **1. PRELIMINARY ACTIVITIES**

1.1 How long did you spend preparing for this lesson?
---

## 2. THE LESSON

<ul> <li>2.1 Please describe the use of computers during this lesson</li> <li>2.3 student had a computer to themselves</li> <li>2-3 students shared computers</li> <li>More than 3 students shared computers</li> <li>I used one computer and a projector, while students did not have their own computer</li> <li>There were no computers used during the lesson</li> </ul>
2.2 How many students used computers during this lesson?
<ul> <li>2.3 What facilitation techniques did you use to engage the students in the lesson?</li> <li>Students participated in a large class discussion</li> <li>Students participated in small group discussions</li> <li>I used the techniques specified in the lesson (e.g. game)</li> <li>None</li> <li>Other:</li> </ul>

Ple	ease answer the following questions about how the lesson was conducted:
Α.	Did you engage the students in a discussion about the Cyber Security?
В.	Did students complete the learning activities about viruses, worms, and Trojan horses as well as bullying? Yes, using the software provided Yes, using the preprinted activity pages provided No
C.	Did students develop skits/scenarios about bullying or viruses?  Yes  No
D.	Did students present the skits/scenarios and engage in class discussion about them?
E.	Did students complete the "feel good" activity, in which each student wrote compliments about each other student? Yes No
F.	Did you use the optional PowerPoint presentation provided on CD for use as a student guide?Yes No
G.	If any activities were omitted, changed, or added to the lesson, please describe what was done:

2.4 How long did you spend on the lesson (not including the Youth Empowerment Activity)?

30 minutes or less
45 minutes
🗌 1 hour

1 hour and 15 minutes

☐ 1 hour and 30 minutes ☐ 1 hour and 45 minutes ☐ 2 hours or more

2.5 Please estimate	how many stude	ents were engaged (a	actively involved	) in the lesson overall.
None 🗌	Some	Most 🗌	🗋 All	

2.6 Did you have any challenges (not enough time, lack of appropriate materials, etc.) implementing this lesson?

No challenges were encountered while implementing this activity

Some challenges were encountered while implementing this activity

Substantial challenges were encountered while implementing this activity

2.7 If so, please describe the challenge(s):

2.8 Were the challenge(s) you encountered while implementing this lesson resolved?

The challenge(s) were completely resolved

The challenge(s) were somewhat resolved

The challenge(s) were not resolved

We encountered no challenges during implementation of this lesson

2.9 If so, please describe how the challenge(s) were overcome:

2.10 If you were going to teach this lesson again, please describe what would you do differently (if anything):\_\_\_\_\_\_

# **3. CULMINATING ACTIVITIES**

3.1 How closely did you follow the curriculum guide in teaching this I-SAFE lesson?

I did not use the curriculum guide

Not very closely – I frequently adapted the material as appropriate

Somewhat closely – I sometimes adapted the material as appropriate

Very closely – I taught the material as specified

3.2 Did you feel you had enough time to complete all of the sections of this lesson? (If you skipped or rushed through some parts, check "no")  $\Box$  Yes  $\Box$  No

3.3 Did students complete a youth empowerment activity? Yes No \*\*If yes, please complete the remainder of this form.

\*\*\*\* PLEASE REMEMBER TO FILL OUT THE ATTENDANCE LOG FOR THIS LESSON.

# 4. YOUTH EMPOWERMENT ACTIVITIES

4.1 Please **check the ONE (1) MAIN Youth Empowerment Activity** that was selected for this lesson - this could be a Classroom Empowerment Activity OR an Outreach Activity.

Perform their skits for another class.

Perform their skits for the school through closed circuit television.

Go to another class and perform the self-esteem activity.

Write a plan to deal with cyber bullying incidents in school and present to the administration.

Incorporate the skits into an i-Parent Night, Internet safety week, Classroom Open House, or School Assembly.

Our class did something else for our empowerment activity. Please describe it here:\_\_\_\_\_

<ul> <li>4.2 When was the youth empowerment activity selected?</li> <li>Before the lesson was delivered</li> <li>During the lesson</li> <li>Immediately following the lesson</li> <li>The day after the lesson</li> <li>More than 1 day after the lesson</li> </ul>
<ul> <li>4.3 Who was involved in selecting the Youth Empowerment activity(ies)?</li> <li>I selected the activity(ies)</li> <li>The students selected the activity(ies)</li> <li>We selected the activity(ies) together</li> </ul>
4.4 How long did you (the instructor only) spend preparing this Youth Empowerment activity?
4.5 How many students participated in this Youth Empowerment activity?
<ul> <li>4.6 How much time did the students spend completing the activity?</li> <li>30 minutes or less</li> <li>45 minutes</li> <li>1 hour and 45 minutes</li> <li>1 hour</li> <li>2 hours or more</li> <li>1 hour and 15 minutes</li> </ul>
<ul> <li>4.7 Did you have any challenges (not enough time, lack of appropriate materials, etc.) implementing the Youth Empowerment activity?</li> <li>No challenges were encountered while implementing this activity</li> <li>Some challenges were encountered while implementing this activity</li> <li>Substantial challenges were encountered while implementing this activity</li> </ul>
4.8 Please describe the challenge(s) you encountered while implementing this activity:
<ul> <li>4.9 Were the challenge(s) you encountered while implementing this activity resolved?</li> <li>The challenge(s) were completely resolved</li> <li>The challenge(s) were somewhat resolved</li> <li>The challenge(s) were not resolved</li> <li>We encountered no challenges during implementation of this activity</li> </ul>
4.10 If so, please describe how the challenges were overcome?

**ADDITIONAL COMMENTS:** (Please provide any additional comments below)

APPENDIX 5: Online Survey

# **APPENDIX 5: ONLINE SURVEY**

Do you know the rules for using the Internet at your school?

O No

O Yes

O I don't know if my school has rules for using the Internet

Have you taken an Internet safety class from one of the teachers at your school?  $\mathsf{O}\xspace{No}$  No

O Yes

How old are you?

- O 9 years old or younger
- O 10 years old
- O 11 years old
- O 12 years old
- O 13 years old
- O 14 years old or older

Are you a: O Girl O Boy

What grade are you in? O 5<sup>th</sup> grade O 6<sup>th</sup> grade O 7<sup>th</sup> grade O 8<sup>th</sup> grade

How do you describe yourself?

O Black or African-American

O White or Caucasian

O Native American or Alaskan Native

O Asian-American or Pacific Islander (Chinese, Japanese, Hawaiian, Laotian, etc.)

O Latino/Hispanic (Mexican, Puerto Rican, Cuban, or other Latin-American)

O Mixed (More than one of the above)

O Other (please specify): \_\_\_\_

In a typical <u>week</u>, how often do you use the Internet when you are <u>NOT</u> at home (e.g., a friend's house)?

O Never

O Less than one day a week

O One day a week

O A few days a week

O Almost every day or every day

On a typical <u>day</u>, how much time do you spend on the Internet when you are <u>NOT</u> at school (e.g., a friend's house)?

O Never

O Less than one hour a day

O Between 1 and 3 hours a day

O More than 3 hours a day

On a typical <u>day</u>, how much time do you spend on the Internet when you are <u>at school</u>? O Never

O Less than one hour a day

O Between 1 and 3 hours a day

O More than 3 hours a day

Which do you use most often to talk to people online?

O E-mail

O Chat rooms

O Instant Message (IM)

O Message Boards

O Other: \_\_\_\_\_

How many computers are in your home right now?

O None

O One

O Two or more

Are any of the computers in your home connected to the Internet

O No

O Yes

Where are the computers located that are connected to the Internet? (Check all that apply)

O My bedroom

O Another family member's room

O Kitchen/dining room

O Family room/ living room/den/basement

O Other (please tell us where): \_\_\_\_\_

Does your home computer have <u>filtering software</u> that stops you from looking at some websites while online?

O No

O I don't know what filtering software is

O Yes

O I don't know

Do you know how to turn off the <u>filtering software</u>? O No O Yes Do any of your home computers have virus protection software installed?

O No

O I don't know what virus protection software is

O Yes

O I don't know

Do you know:

A website or a phone number to report inappropriate things/behavior that occur on the Internet? O No  $% \mathcal{O}$ 

O Yes

Do you know:

How to erase the history of websites you have visited?

O No

O Yes

How would you describe your computer skills?

O I don't have very good computer skills

O I have okay computer skills

O I have good computer skills

O I have very good computer skills

How hard is it for you to find information on the Internet?

O Very hard

O Hard

O A little bit hard

O Not hard at all

How likely are the following:

If you reveal your personal information to someone you only met online, how likely is it that the person will try to contact you?

O Not at all likely

O A little likely

O Somewhat likely

O Very likely

How likely are the following:

If you agree to have a secret face-to-face meeting with someone you only talk to online, how likely is it that the person will try to harm you?

O Not at all likely

O A little likely

O Somewhat likely

O Very likely

How likely are the following:

If you open e-mails from someone you don't know, how likely is it that your computer will get a virus?

- O Not at all likely
- O A little likely
- O Somewhat likely
- O Very likely

What grade were you in when you first used the Internet?

- O I don't remember
- O Pre-school
- O Kindergarten
- O Kindergan O 1<sup>st</sup> grade O 2<sup>nd</sup> grade O 3<sup>rd</sup> grade O 4<sup>th</sup> grade O 5<sup>th</sup> grade O 6<sup>th</sup> grade O 7<sup>th</sup> grade O 8<sup>th</sup> grade

When you are not at school, how often does an adult sit with you while you are online?

- O Never
- O Sometimes
- O Most of the time
- O All the time

When you are not at school, how often does an adult check in on you while you are online?

- O Never
- O Sometimes
- O Most of the time
- O All the time

When you are not at school, how often does an adult ask you which websites you have visited?

- O Never
- **O** Sometimes
- O Most of the time
- O All the time

When you are NOT at school, how often do you turn off filtering software when you are online? O Never

- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

When you are <u>NOT at school</u>, how often do you erase the history of websites you have visited? O Never

- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost Every day or everyday
- O I don't know how to erase the history of websites I have visited

When you are <u>NOT at school</u>, how often do you:

- Use email?
- O Never
- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

When you are <u>NOT at school</u>, how often do you:

Blog or write in an online journal?

- O Never
- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

When you are <u>NOT at school</u>, how often do you:

- Use Instant Messaging (IM)?
- O Never
- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

When you are <u>NOT at school</u>, how often do you: Download music?

- O Never
- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

When you are <u>NOT at school</u>, how often do you: Download movies?

- O Never
- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

When you are <u>NOT at school</u>, how often do you:

Use bulletin boards/message forums?

O Never

- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

When you are <u>NOT at school</u>, how often do you: Gather information for schoolwork from the Internet?

O Never

- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

When you are <u>NOT at school</u>, how often do you:

Shop for things online such as books, clothing, or music?

- O Never
- O Less than one day a week
- O One day a week

O A few days a week

O Almost every day or every day

When you are NOT at school, how often do you:

- Go to public/open chat rooms?
- O Never
- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day
- When you are <u>NOT at school</u>, how often do you: Go to chat rooms that are private/ invitation only?
- O Never
- O Less than one day a week
- O One day a week
- O A few days a week
- O Almost every day or every day

How much do you know about the following things? How much do you know about plagiarism? O Nothing at all O A little O Some

O A lot

How much do you know about the following things? How much do you know about copyright laws? O Nothing at all

O A little

O Some

O A lot

How much do you know about the following things? How much do you know about cyber bullying?

O Nothing at all

O A little

O Some

O A lot

How much do you know about the following things? How much do you know about computer viruses? O Nothing at all

O Nothing at a

O A little

- O Some
- O A lot

How much do you know about the following things? How much do you know about moderated chat rooms? O Nothing at all

O A little

O Some

O A lot

How much do you know about the following things? How much do you know about intellectual property?

O Nothing at all

O A little

O Some

O A lot

How much do you know about the following things? How much do you know about Internet predators? O Nothing at all

- O A little
- O Some
- O A lot

How likely are the following?

In general, how likely is it that someone you meet online would pretend to be someone they are not?

- O Not at all likely
- O A little likely
- O Somewhat likely
- O Very likely

How likely are the following?

In general, how likely is it that someone you meet online would try to hurt or scare you?

- O Not at all likely
- O A little likely
- O Somewhat likely
- O Very likely

In general, how much do you think you can trust someone that you meet on line?

- O Not at all
- O A little
- O Some
- O A lot

How long would you wait to do the following?

How long would you wait after meeting someone online before you **give out your e-mail** address?

- O A day or less
- O A few days
- O A few weeks
- O A few months
- O A year or more
- O I never would

How long would you wait to do the following?

How long would you wait after meeting someone online before you **give out your phone number?** 

- O A day or less
- O A few days
- O A few weeks
- O A few months
- O A year or more
- O I never would

How long would you wait to do the following?

How long would you wait after meeting someone online before you **meet him or her in person?** O A day or less

- O A few days
- O A few weeks
- O A few months
- O A year or more
- O I never would

Please rate your agreement with each statement below:

It is safe to enter my name and other personal information into an Instant Messenger (IM) service when I sign up

O Strongly disagree

O Disagree

O Agree

O Strongly agree

Please rate your agreement with each statement below:

It is safe to open e-mail from someone I don't know

O Strongly disagree

O Disagree

O Agree

O Strongly agree

Please rate your agreement with each statement below:

It is safe to tell someone I met online about where I hang out with my friends

- O Strongly disagree
- O Disagree
- O Agree
- O Strongly agree

Please rate your agreement with each statement below:

It is safe to give personal information to others I met online

- O Strongly disagree
- O Disagree
- O Agree
- O Strongly agree

Please rate your agreement with each statement below:

It is ok to be rude to others when I am talking to them online because nobody knows it is me O Strongly disagree

O Disagree

O Agree

O Strongly agree

Please rate your agreement with each statement below:

It is safe to open attachments after they've been scanned through virus protection software

- O Strongly disagree
- O Disagree

O Agree

O Strongly agree

## Please rate your agreement with each statement below:

It is safe to forward e-mails

- O Strongly disagree
- O Disagree
- O I do not know
- O Agree
- O Strongly agree

Please rate your agreement with each statement below:

An Internet predator might try to contact kids my age by chatting with them online

- O Strongly disagree
- O Disagree
- O Agree
- O Strongly agree
- O I don't know what an Internet Predator is

Please rate your agreement with each statement below:

An Internet predator might try to contact kids my age by sending e-mails to addresses that appear to belong to kids my age

- O Strongly disagree
- O Disagree
- O Agree
- O Strongly agree
- O I don't know what an Internet Predator is

Please rate your agreement with each statement below:

An Internet predator might try to contact kids my age by sending Instant Messages (IMs) to screen names that appear to belong to kids my age

- O Strongly disagree
- O Disagree
- O Agree
- O Strongly agree
- O I don't know what an Internet Predator is

Please rate your agreement with each statement below:

An Internet predator might try to contact kids my age by checking online sign-up forms

- O Strongly disagree
- O Disagree

O Agree

O Strongly agree

O I don't know what an Internet Predator is

Please rate your agreement with each statement below:

An Internet predator might try to contact kids my age by posting a message on a discussion board/forum for kids

O Strongly disagree

O Disagree

O Agree

O Strongly agree

O I don't know what an Internet Predator is

Please rate your agreement with each statement below:

An Internet predator might try to meet kids in person that he/she talked to online.

O Strongly disagree

O Disagree

O Agree

- O Strongly agree
- O I don't know what an Internet Predator is

When you purchase media such as software, games, CDs, or DVDs, do you have the legal right to:

Let friends listen to, watch, or play with your copy?

O No

O Yes

O I don't know

When you purchase media such as software, games, CDs or DVDs, do you have the legal right to:

Download it onto your friend's computer for him/her to keep?

O No

O Yes

O I don't know

When you purchase media such as software, games, CDs or DVDs, do you have the legal right to:

Copy or burn it for your friend?

O No

O Yes

O I don't know

Now we are going to talk about the things you may have done while on the Internet in the <u>last</u> <u>month</u>.

In the *last month*:

How often have you found yourself at a website that you knew was inappropriate for someone your age?

- O Not at all
- O At least once
- O A few times
- O A lot

In the *last month*:

How often have you gambled on an Internet site? O Not at all O At least once O A few times O A lot

In the *last month*:

How often have you looked at inappropriate pictures or websites on the Internet?

O Not at all

O At least once

O A few times

O A lot

In the *last month*:

How ofte4n have you opened spam, e.g. junk mail?

- O Not at all
- O At least once
- O A few times
- O A lot

In the *last month*:

How often have you sent or posted things online that were rude or mean to someone else? O Not at all O At least once O A few times QA lot

In the *last month*:

How often has someone been rude (for example: mean, harass, bully) to you on the Internet? O Not at all O At least once

- O A few times
- O A lot

## In the *last month*:

How often have you talked with your sister, brother, or other kids in your family about dangerous things (for example: inappropriate sites, web sites that ask for personal information) on the Internet?

- O Not at all
- O At least once
- O A few times
- O A lot

## In the *last month*:

How often have you talked with adults in your family about dangerous things (for example: inappropriate sites, web sites that ask for personal information) on the Internet?

- O Not at all
- O At least once
- O A few times

QA lot

## In the *last month*:

How often have you talked to your friends about dangerous things (for example: inappropriate sites, web sites that ask for personal information) on the Internet?

O Not at all

O At least once

O A few times

O A lot

## In the *last month*:

How often have you talked with kids who are younger than you about dangerous things (for example: inappropriate sites, web sites that ask for personal information) on the Internet? O Not at all

- O At least once
- O A few times
- O A lot
- In the *last month*:

How often have you used information from the Internet or software for your schoolwork <u>without</u> citing the source?

- O Not at all
- O At least once
- O A few times

O A lot

In the *last month*: How often have you made a copy of CD music or a DVD for someone else? O Not at all O At least once O A few times

O A lot

In the *last month*, have you found out about any of your friends doing things online you thought were inappropriate?

O No

O Yes

In the *last month*:

How often have you told a friend your password? O Not at all O At least once O A few times O A lot

In the *last month*:

How often have you provided your e-mail address to someone online that was introduced to you by a friend?

- O Not at all
- O At least once
- O A few times

O A lot

In the *last month*: How often has anyone sent you links to inappropriate websites? O Not at all O At least once O A few times O A lot

In the *last month*: How often has anyone scared you on the Internet? O Not at all O At least once O A few times O A lot In the *last month*: As far as you know, how often has anyone made rude or inappropriate comments *about you* to others on the Internet?

O Not at all

O At least once

O A few times

O A lot

Do you have an email address or screen name?

O No

O Yes

Does your e-mail address or screen name: Tell your name?

O No

O Yes

Does your e-mail address or screen name: Tell the area where you live?

O No

O Yes

Does your e-mail address or screen name: Tell your age?

O No

O Yes

Does your e-mail address or screen name: Tell that you are a boy or girl? O No

O Yes

Please rate your agreement with each statement below:

If you were to <u>download</u> music, movies or games from the Internet <u>without paying</u>, would you be stealing from someone else?

O No

O Yes

O I Don't Know

Please rate your agreement with each statement below:

If you were to <u>copy</u> articles, pictures, and other information into schoolwork without <u>citing the</u> <u>source</u>, would you be stealing something from someone else?

O No

O Yes

O I Don't Know

In the <u>last month</u>:

How often has someone you have only met on the Internet asked you to keep your friendship a secret?

O Not at all

O At least once

O A few times

O A lot

In the <u>last month</u>:

How often has someone you have only met on the Internet asked to meet you in person?

O Not at all

O At least once

O A few times

O A lot

In the <u>last month</u>:

How often has someone you have only met on the Internet asked for personal information like your photo, phone number, or street address?

O Not at all

O At least once

O A few times

O A lot

In the <u>last month</u>, when you found yourself at a website that you knew was inappropriate for someone your age, what did you do? (check all that apply)

O I looked at the website

O I closed the browser right away

O I went back to the website later

O I told my friends about the website

In the <u>last month</u>, how have you given out your name, address, or phone number online? (Check all that apply)

O in online forms on websites

O in blogs or online journals

O on bulletin boards/message forums

O by e-mail

O in chat rooms

O by instant message (IM)

O Other: \_\_\_\_

O I have not given out my name, address or phone number online in the last month.

The last time <u>someone you've only met online</u> (someone you did not meet through one of your friends) asked you for personal information, what did you do about it? (check ALL that apply)

- O I gave them some personal information
- O I continued to stay in touch with the person
- O I told them to stop asking me for personal information
- O I ignored them
- O I tried to block that person from contacting me
- O I told an adult
- O I told my friends
- O Nobody online has asked me for personal information

Now we are going to ask some questions about the types of Internet safety guidelines you may have heard of.

Have you ever heard about <u>NOT giving out personal information in online registration forms</u> without your parents' permission? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about <u>NOT giving out personal information to people you meet online</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about N<u>OT calling people you meet online without your parents' permission</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about <u>NOT trusting people you meet online</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about <u>NOT opening attachments if you don't know what they are</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other:
- O I never heard it

Have you heard about <u>deleting inappropriate e-mails from others</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about <u>NOT opening e-mail from people I you don't know</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about going to chat rooms for kids? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about using chat rooms that are moderated? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_
- O I never heard it

Have you heard about avoiding computer viruses? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about <u>NOT meeting online friends in person without your parents' permission</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other:
- O I never heard it

Have you heard about <u>identifying your source when you use information from a website</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

Have you heard about <u>NOT being rude to others online</u>? (Check all that apply)

- O I heard it from my teachers at school
- O I heard it from my parent/guardian
- O I heard it from my friends
- O Other: \_\_\_\_
- O I never heard it

How honest were you in filling out this survey?

- O I wasn't honest
- O I was honest some of the time
- O I was honest most of the time
- O I was very honest

APPENDIX 6: Scales

# **APPENDIX 6: SCALES**

	APPENDIX 6: SCALES					
Name of Scale	Number of Items/ categories	Alpha Coefficient	Description of Scale	Type of Variable		
Intellectual Property	2 Items	0.693358	Measures knowledge of intellectual property related to legal	Outcome		
Knowledge: Media	1=No; 0.5= I don't know;;0=Yes		rights of purchased media.	(Knowledge)		
Intellectual Property	2 Items	0.658907	Measures knowledge of intellectual property theft related to	Outcome		
Knowledge: Theft	1=No; 0.5= I don't know;;0=Yes		downloading media from Internet without paying for it and copying Web materials without citing the source.	(Knowledge)		
Internet Safety Knowledge	7 Items	0.845137	Measures knowledge regarding several Internet Safety	Outcome		
	1=Nothing at all; 2= A little; 3= some; 4= A lot		concepts covered in the curriculum.	(Knowledge)		
Management Risk	4 Items	0.829898	Measures the perception of risk and to some degree the level of	Outcome		
-	1= Not all all likely; 2= A		trust respondents have in people they meet online.	(Knowledge)		
	Little likely; 3= Somewhat		Participant's attitudes about the risk of interacting with others	_		
	likely; 4=Very likely		online			
Predator Identification	6 Items	0.946899	Measures knowledge of possible actions of Internet predators.	Outcome		
	1= Strongly disagree;			(Knowledge)		
	2=Disagree; 3= I don't know;					
	4= Agree; 5= Strongly agree					
Sharing Personal Information	3 Items	0.629855	Measures knowledge of safe Internet online behavior as	Outcome		
	1= Strongly disagree;		pertaining to sharing personal information	(Knowledge)		
	2=Disagree; 3= Agree; 4=					
	Strongly agree					
Knowledge of Computer	3 Items	0.637575	Measures knowledge of how computer viruses are spread.	Outcome		
Viruses	1= Strongly disagree;			(Knowledge)		
	2=Disagree; 3= Agree; 4=					

		Appendi	x 6: Scales		
Name of Scale	Number of Items/ categories	Alpha Coefficient	Description of Scale	Type of Variable	
	Strongly agree				
Mentoring	4 Items	0.790197	Measures the extent to which respondents have talked to others	Outcome	
	1= Not at all; 2= At least		about dangerous things on the Internet.	(behavior)	
	once; 3= A few times; 4= A				
	lot				
Inappropriate Online	9 Items	0.764541	Measures the frequency of risky and/or inappropriate behavior	Outcome	
Behavior	1= Not at all; 2= At least		online	(behavior)	
	once; 3= A few times; 4= A				
	lot				
Comfort Level with Online	3 Items	0.850647	Measures the comfort that participants felt with people they	Outcome	
Acquaintances	1 = A day or less; 2 = A few		met online.	(behavior)	
	days; 3= A few weeks; 4= A				
	few months; 5= A year or				
	more; 6= I never would				
E-mail Protocol	4 Items	0.500821	Measures the types of identifying information respondents	Outcome	
	0= yes; 1=No		have in their e-mail addresses or screen names.	(behavior)	
Baseline Online Behavior	9 Items	0.7915	Measures the type and frequency of online behaviors	Independent	
	1=Never; 2=Less than one		respondents engaged before the program was implemented		
	day a week; 3=one day a		(baseline)		
	week; 4= a few days a week;				
	5= Almost every day or				
	every day				
Parental Supervision	3 Items	0.753465	Measures the level of parental supervision of online computer	Independent	
	1= Never; 2= Sometimes; 4=		usage at home.		
	Most of the time; 4= All the				
	time				

APPENDIX 6: SCALES						
Name of Scale         Number of Items/ categories         Alpha Coefficient         Description of Scale						
Internet Safety	13 Items Percentage of items answered correctly	0.88	Measures knowledge of safe Internet practices.	Independent		

**APPENDIX 7: LIST OF ITEMS BY SCALES** 

# **APPENDIX 7: LIST OF ITEMS BY SCALES**

APPENDIX 7: List of Items By Scales					
Scale	Alpha Coeffecient				
Intelectual Property Knowledge: Media	0.693358				
"When you purchase media such as software, games, CDs, or DVDs, do you have the legal right to Download it onto your friend's computer for him or her to keep?" 1 'No' 0.5 'I don't know' 0 'Yes'					
When you purchase media such as software, games, CDs, or DVDs, do you have the legal right to Copy or burn it for your friend'. 1 'No' 0.5 'I don't know' 0 'Yes'					
Intelectual Property Knowledge: Theft	0.658907				
Please rate your agreement with each statement below If you were to download music, movies or games from the Internet without paying for it, would you be stealing from someone else?'. 0 'No' 1 'Yes' 0.5 "I don't know".					
Please rate your agreement with each statement below If you were to copy articles, pictures, and other information into schoolwork without citing the source, would you be stealing something from someone else?'. 0 'No' 1 'Yes' 0.5 "I don't know".					
Internet Safety Knowledge	0.845137				
How much do you know about the following things? How much do you know about plagiarism?'. 1 'Nothing at all' 2 'A little' 3 'Some' 4 'A lot'.					
How much do you know about the following things? How much do you know about copyright laws?'. 1 'Nothing at all' 2 'A little' 3 'Some' 4 'A lot'.					
How much do you know about the following things? How much do you know about cyber bullying?'. 1 'Nothing at all' 2 'A little' 3 'Some' 4 'A lot'.					
How much do you know about the following things? How much do you know about computer viruses?'. 1 'Nothing at all' 2 'A little' 3 'Some' 4 'A lot'.					

APPENDIX 7: List of Items By Scales	
How much do you know about the following things? How much do you know about moderated chat rooms?'. 1 'Nothing at all' 2 'A little' 3 'Some' 4 'A lot'.	
How much do you know about the following things? How much do you know about intellectual property?' 1 'Nothing at all' 2 'A little' 3 'Some' 4 'A lot'.	
How much do you know about the following things? How much do you know about Internet predators?'. 1 'Nothing at all' 2 'A little' 3 'Some' 4 'A lot'.	
Managing Risk	0.829898
How likely are the following? In general, how likely is it that someone you meet online would pretend to be someone they are not?'. 1 'Not at all likely' 2 'A little likely' 3 'Somewhat likely' 4 'Very likely'.	
How likely are the following? In general, how likely is it that someone you meet online would try to hurt or scare you?'. 1 'Not at all likely' 2 'A little likely' 3 'Somewhat likely' 4 'Very likely'.	
If you reveal your personal information to someone you only met online, how likely is it that the person will try to contact you?'. 1 'Not at all likely' 2 'A little likely' 3 'Somewhat likely' 4 'Very likely'.	
If you agree to have a face to face meeting with someone you only talk to online, how likely is it that the person will try to harm you?'. 1 'Not at all likely' 2 'A little likely' 3 'Somewhat likely' 4 'Very likely'.	
Predator Identification	0.946899

APPENDIX 7: LIST OF ITEMS BY SCALES						
Please rate your agreement with each statement below An Internet predator might try to contact kids my age by chatting with them online' 1 'Strongly disagree' 2 'Disagree' 3 "I don't know what an Internet Predator is"						
4 'Agree' 5 'Strongly agree'						
Please rate your agreement with each statement below An Internet predator might try to contact kids my age by sending emails to addresses that appear to belong to kids my age'. 1 'Strongly disagree' 2 'Disagree' 3 "I don't know what an Internet Predator is" 4 'Agree'						
5 'Strongly agree'						
Please rate your agreement with each statement below An Internet predator might try to contact kids my age by sending Instant Messages (IM)s to screen names that appear to belong to kids my age'. 1 'Strongly disagree' 2 'Disagree' 3 "I don't know what an Internet Predator is" 4 'Agree' 5 'Strongly agree'						
Please rate your agreement with each statement below An Internet predator might try to contact kids my age by posting a message on a discussion board or forum for kids'. 1 'Strongly disagree' 2 'Disagree' 3 "I don't know what an Internet Predator is" 4 'Agree' 5 'Strongly agree'						
Please rate your agreement with each statement below An Internet predator might try to meet kids in person that he or she talked to online'. 1 'Strongly disagree' 2 'Disagree' 3 "I don't know what an Internet Predator is" 4 'Agree' 5 'Strongly agree'						
<ul> <li>'Please rate your agreement with each statement below An Internet predator might try to contact kids my age by checking online sign up forms'.</li> <li>1 'Strongly disagree'</li> <li>2 'Disagree'</li> <li>3 "I don't know what an Internet Predator is"</li> <li>4 'Agree'</li> <li>5 'Strongly agree'</li> </ul>						
Sharing Personal Information	0 600055					
Sharing Personal Information	0.629855					

APPENDIX 7: List of Items By Scales	
<ul> <li>'Please rate your agreement with each statement below It is safe to enter my name and other personal information into an Instant Messenger (IM) service when I sign up'.</li> <li>1 'Strongly disagree'</li> <li>2 'Disagree'</li> <li>3 'Agree and Strongly agree'.</li> </ul>	
'Please rate your agreement with each statement below It is safe to tell someone I met online about where I hang out with my f 1 'Strongly disagree' 2 'Disagree' 3 'Agree and Strongly agree'.	
<ul> <li>'Please rate your agreement with each statement below It is safe to give personal information to others I met online'.</li> <li>1 'Strongly disagree'</li> <li>2 'Disagree'</li> <li>3 'Agree and Strongly agree'.</li> </ul>	
Computer Viruses	0.637575
Please rate your agreement with each statement below It is safe to open email from someone I don't know'. 1 'Strongly disagree' 2 'Disagree' 3 'Agree and Strongly agree'.	
"Please rate your agreement with each statement below It is safe to open attachments after they've been scanned through virus protection software". 1 'Strongly disagree' 2 'Disagree' 3 'Agree and Strongly agree'.	
'Please rate your agreement with each statement below It is safe to forward emails'. 1 'Strongly disagree' 2 'Disagree' 3 'Agree and Strongly agree'.	
Communication	0.790197
In the last month How often have you talked with your sister, brother, or other kids in your family about dangerous things, for example inappropriate sites, web sites that ask for personal information, on the Internet?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	

APPENDIX 7: List of Items By Scales	
In the last month How often have you talked with adults in your family about dangerous things , for example inappropriate sites, web sites that ask for personal information, on the Internet?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
In the last month How often have you talked to your friends about dangerous things, for example inappropriate sites, web sites that ask for personal information, on the Internet?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
In the last month How often have you talked with kids who are younger than you about dangerous things, for example inappropriate sites, web sites that ask for personal information, on the Internet?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
Inappropriate Online Behavior	0.764541
In the last month How often have you found yourself at a website that you knew was inappropriate for someone your age?' 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
In the last month How often have you gambled on an Internet site?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
In the last month How often have you looked at inappropriate pictures or websites on the Internet?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
In the last month How often have you opened spam, e.g. junk mail?' 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
In the last month How often have you sent or posted things online that were rude or mean to Someone else?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	

APPENDIX 7: List of Items By Scales	
In the last month How often have you made a copy of CD music or DVD for someone else?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
In the last month How often have you used information from the Internet or software for your schoolwork without citing the source?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
Please answer the following questions In the last month, how often have you told a friend your password?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
Please answer the following questions How often have you provided your email address to someone online that was introduced to you by a friend?'. 1 'Not at all' 2 'At least once' 3 'A few times' 4 'A lot'.	
Comfort level with online acquaintances	0.850647
How long would you wait to do the following? How long would you wait after meeting someone online before you give out your email address?' 1 'A day or less' 2 'A few days' 3 'A few weeks' 4 'A few months' 5 'A year or more' 6 'I never would'.	
How long would you wait to do the following? How long would you wait after meeting someone online before you give out your phone number?' 1 'A day or less' 2 'A few days' 3 'A few weeks' 4 'A few months' 5 'A year or more' 6 'I never would'.	
How long would you wait to do the following? How long would you wait after meeting someone online before you meet him or her in person?' 1 'A day or less' 2 'A few days' 3 'A few weeks' 4 'A few months' 5 'A year or more'	
6 'I never would'.	

APPENDIX 7: LIST OF ITEMS BY SCALES	
'Do you have an email address or screen name?'. 0 'Yes' 1 'No'	
'Do you have an email address or screen name tell your name?'. 0 'Yes' 1 'No'	
'Do you have an email address or screen name tell the area where you live?'. 0 'Yes' 1 'No'	
Do you have an email address or screen name tell your age?'. 0 'Yes' 1 'No'	
Do you have an email address or screen name tell that you are a boy or girl?'. 0 'Yes' 1 'No'	

APPENDIX 8: Demographics of Sample

## **APPENDIX 8: DEMOGRAPHICS OF SAMPLE**

GRADE DISTRIBUTION OF SAMPLE, BY SITE						
Site	Grade	Treatment (N=1,429) <sup>1</sup> Comparison (N=771)				
		Ν	%	Ν	%	
Site 1	5	82	25.9	34	19.7	
	6	73	23.0	50	28.9	
	7	75	23.7	45	26.0	
	8	87	27.4	44	25.4	
Site 2	5	121	27.8	50	26.9	
	6	101	23.2	45	24.2	
	7	105	24.1	40	21.5	
	8	108	24.8	51	27.4	
Site 3	5	29	19.7	34	33.0	
	6	36	24.5	40	38.8	
	7	36	24.5	29	28.2	
	8	46	31.3	0	0	
Site 4	6	34	37.8	35	43.2	
	7	33	36. 7	23	28.4	
	8	23	25.6			
Site 5	6	149	52.5	92		
	8	135	47.5	78		
Site 6	7	101	100	58		
Site $7^2$	5	27	100	0		
Site 8 <sup>2</sup>	5	28		0		

AGE DISTRIBUTION OF SAMPLE, BY SITE									
Site	Age	Treatment (N=1,383) 1Comparison (N=771)					Treatment (N=1,383) <sup>1</sup>		$(N=771)^{1}$
		Ν	%	Ν	%				
Site 1	9	1	0.3	0	0				
	10	62	19.6						
	11	66	20.8	40	23.1				
	12	73	23.0	51	29.5				
	13	86	27.1	39	22.5				
	14	29	9.1	17	9.8				
Site 2	9	1	0.2	0	0				
	10	99	22.8	38	20.4				
	11	84	19.3	35	18.8				
	12	98	22.5	50	26.9				
	13	110	25.3	43	23.1				
	14	43	9.9	20	10.8				
Site 3	10	24	23.8	31	30.1				
	11	36	35.6	36	35.0				
	12	30	29.7	29	28.2				
	13	11	10.9	7	6.8				
Site 4	10	1	1.1	2	2.5				
	11	25	27.8	16	19.8				
	12	24	26.7	31	38.3				
	13	35	38.9	27	33.3				
	14	5	5.6	5	6.2				
Site 5	10	1	0.4	1	0.6				
	11	113	39.8	41	24.1				
	12	34	12.0	49	28.8				
	13	99	34.9	49	28.8				
	14	37	13.0	30	17.6				
Site 6	11	1	1.0	0	0				
	12	43	42.6	33	56.9				
	13	51	50.5	23	39.7				
	14	6	5.9	2	3.4				
Site 7 <sup>2</sup>	9	1	3.7	0	0				
	10	21	77.8	0	0				
	11	5	18.5		0				
Site 8 <sup>2</sup>	10	23	82.1	0	0				
	11	4	14.3	0	0				
	13	1	3.6		0				

		GENDER I	DISTRIBUTION	OF SAMPLE,	BY SITE		
Site	Sex	Treatment	$(N=1,376)^{1}$	Comparison	(N=768) <sup>1</sup>	chi-square	p value
		N	%	N	%		
Site 1	Female	159	50.6	92	53.2	0.289	0.591
	Male	155	49.4	81	46.8	0.289	0.391
Site 2	Female	235	54.5	108	58.4	0.779	0 277
	Male	196	45.5	77	41.6	0.779	0.377
Site 3	Female	54	53.5	58	56.3	0.167	0.683
	Male	47	46.5	45	43.7	0.107	0.085
Site 4	Female	47	52.2	42	51.9	.00234	0.961
	Male	43	47.8	39	48.1	.00234	0.901
Site 5	Female	151	53.2	107	63.7	4.77	0.029
	Male	133	46.8	61	36.3	4.77	0.029
Site 6	Female	50	49.5	43	74.1	9.21	0.002
	Male	51	50.5	15	25.9	9.21	0.002
Site $7^2$	Female	15	55.6	0	0		
	Male	12	44.4	0	0		
Site 8 <sup>2</sup>	Female	16	57.1	0	0		
	Male	12	42.9	0	0		

1	RA	CE DISTRI	<b>BUTION OF</b>	SAMPLE, I	BY SITE		
Site	Race	Treat	tment 362) <sup>1</sup>	Comp	arison 761) <sup>1</sup>	chi-square	p value
		Ν	%	Ν	%		
Site 1	White or Caucasian Black or African-	290		161	94.7	0.324	0.850
	American Other	1	0.3 5.5		0.6 4.7		
Site 2	White or Caucasian Black or African-	200					
	American	153			30.2	2.20	0.333
G:4- 2	Other White on Concession	78			17.0		
Site 3	White or Caucasian Other	90 9	90.9 9.1	88 15		1 4 4	0.230
Site 4	White or Caucasian Latino or Hispanic	24 50			33.3 53.1	0.775	0.679
	Other	14			13.6		0.079
Site 5	White or Caucasian	198		114	68.3		
	Black or African- American Other	38 34			5.4 25.9		0.003
Site 6	White or Caucasian	62	62.0				
	Black or African- American Other	4			8.6 25.9		0.328
Site 7 <sup>2</sup>	White or Caucasian Black or African-	6					
	American	1	3.7				
	Latino or Hispanic Other	17	63.0 11.1				
Site 8 <sup>2</sup>	White or Caucasian	2	7.2				
	Latino or Hispanic	23	82.1				
1	Other	3	10.7				

**APPENDIX 9:** 

**TESTS PERFORMED TO ASSESS EQUIVALENCE AT BASELINE** 

# APPENDIX 9: TESTS PERFORMED TO ASSESS EQUIVALENCE AT BASELINE

STUDENT CHARACTERISTICS								
Student Characteristic	Treatment (n= 1328)	Comparison (n= 771)	Chi- square	p- value				
Sex								
Male	632	321	6.98	0.005				
Female	696	450						
Race								
White	864	524	14.852	0.002				
Black	196	70						
Latino	96	65						
Other	172	112						
Age								
Mean	11.95	11.96	.344(t)	0.731				
Number of computers at home (mean)	1.28	1.31	.953(t)	.341				
Computer skill (mean)	2.70	2.76	1.423 (t)	.155				
Grade when started using internet (mean)	5.20	5.06	-1.806 (t)	.071				
Hours week Internet use (mean)	3.69	4.14	2.197 (t)	.028				
Parental Supervision (mean)	1.80	1.81	.177(t)	.859				
Previous knowledge internet safety (mean)	.73	.73	.048(t)	.962				
Online behavior (mean)	1.89	1.98	2.66(t)	.008				

 $*p \le .05$ 

T-TEST RESULTS AT BASELIN	NE (TIME 1)	
Scale	t-score	p- value
Intellectual Property Knowledge: Media (Nt= 1298, Nc= 761)	2.401	.016*
Intellectual Property Knowledge: Theft (Nt= 1290, Nc= 761)	-1.358	.175
Internet Safety (Nt= 1303, Nc= 761)	-4.296	.000*
Inappropriate Online Behavior (Nt= 1302, Nc= 761)	-3.260	.001*
Comfort Level with Online Acquaintances (Nt= 1302, Nc= 759)	.874	.382
Managing Risk (Nt= 1304, Nc= 761)	494	.622
Predator Identification (Nt= 1301, Nc= 762)	-2.478	.013*
Sharing Personal Information (Nt= 1302, Nc= 762)	488	.625
Computer Viruses (Nt= 1303, Nc= 762)	673	.501
Communication (Nt= 1293, Nc= 761)	-3.110	.002*
E-mail Protocol (Nt= 854, Nc= 539)	.884	.377

T-TEST RESULTS AT POSTTE	CST (TIME 2)	
Scale	t-score	p- value
Intellectual Property Knowledge: Media (Nt= 1283, Nc= 743)	11.858	.000
Intellectual Property Knowledge: Theft (Nt= 1278, Nc= 740)	4.897	.000
Internet Safety (Nt= 1290, Nc= 746)	12.957	.000
Inappropriate Online Behavior (Nt= 1287, Nc= 745)	-3.532	.000
Comfort Level with Online Acquaintances (Nt= 1284, Nc= 742)	3.160	.002
Managing Risk (Nt= 1292, Nc= 746)	4.666	.000
Predator Identification (Nt= 1289, Nc= 743)	4.750	.000
Sharing Personal Information (Nt= 1287, Nc= 745)	-5.613	.000
Computer Viruses (Nt=1286, Nc= 745)	-4.597	.000
Communication (Nt= 1284, Nc= 743)	492	.623
E-mail Protocol (Nt= 874, Nc= 524)	2.333	.020

APPENDIX 10: Unadjusted Means by Group by Time

# APPENDIX 10: Unadjusted Means by Group By Time

	-						
				Tim	e		
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	.59	.77	.76	.74	.74	.74
	Comparison	.55	.57	.57	.59	.58	.58
SD	Treatment	.37	.34	.36	.37	.37	.37
	Comparison	.37	.39	.40	.39	.40	.40
Ν	Treatment	1298	1283	1195	1222	1188	1207
	Comparison	761	743	735	728	711	713

				Tim	e		
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	.62	.71	.69	.67	.65	.65
	Comparison	.64	.63	.60	.58	.59	.59
SD	Treatment	.34	.38	.39	.38	.38	.39
	Comparison	.35	.36	.38	.38	.38	.39
N	Treatment	1290	1278	1193	1210	1183	1206
	Comparison	761	740	730	724	709	712

			Time						
Statistic	Condition	1	2	3	4	5	6		
Mean	Treatment	2.07	2.76	2.73	2.73	2.74	2.75		
	Comparison	2.21	2.24	2.29	2.26	2.25	2.25		
SD	Treatment	.75	.90	.91	.93	.95	.96		
	Comparison	.78	.83	.89	.89	.88	.89		
N	Treatment	1303	1290	1198	1228	1196	1216		
	Comparison	761	746	738	731	711	711		

			Time							
Statistic	Condition	1	2	3	4	5	6			
Mean	Treatment	2.70	2.95	2.90	2.85	2.86	2.87			
	Comparison	2.72	2.74	2.72	2.73	2.74	2.73			
SD	Treatment	.90	1.00	1.03	1.05	1.06	1.06			
	Comparison	.92	.96	1.01	1.05	1.04	1.03			
N	Treatment	1304	1292	1199	1232	1201	1222			
	Comparison	761	746	734	730	712	713			

				Tim			
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	3.58	3.85	3.86	3.74	3.72	3.70
	Comparison	3.70	3.59	3.55	3.46	3.57	3.57
SD	Treatment	1.11	1.21	1.26	1.31	1.34	1.34
	Comparison	1.02	1.11	1.14	1.25	1.16	1.17
N	Treatment	1301	1289	1195	1227	1189	1212
	Comparison	762	743	736	727	712	713

				Tim	e		
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	1.53	1.40	1.41	1.45	1.46	1.42
	Comparison	1.54	1.53	1.52	1.53	1.54	1.52
SD	Treatment	.51	.49	.53	.56	.58	.54
	Comparison	.51	.51	.56	.58	.58	.57
N	Treatment	1302	1287	1195	1228	1195	1216
	Comparison	762	745	735	728	711	713

				Tim	ie		
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	1.94	1.76	1.70	1.69	1.68	1.66
	Comparison	1.95	1.89	1.83	1.80	1.82	1.82
SD	Treatment	.59	.61	.64	.65	.66	.66
	Comparison	.59	.63	.66	.69	.68	.67
Ν	Treatment	1303	1286	1193	1228	1195	1217
	Comparison	762	745	735	729	710	713

				Tim	e		
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	1.58	1.57	1.53	1.50	1.42	1.40
	Comparison	1.68	1.58	1.48	1.46	1.47	1.40
SD	Treatment	.69	.71	.71	.72	.67	.64
	Comparison	.74	.73	.66	.69	.67	.65
N	Treatment	1293	1284	1193	1219	1188	1208
	Comparison	761	743	735	726	710	713

Γ

				Tim	le		
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	.81	.84	.82	.81	.80	.80
	Comparison	.80	.81	.79	.78	.78	.76
SD	Treatment	.23	.21	.24	.25	.26	.25
	Comparison	.24	.23	.24	.27	.25	.27
Ν	Treatment	854	874	796	823	809	833
	Comparison	539	524	528	504	501	519

				Tim	ie		
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	1.40	1.33	1.33	1.34	1.30	1.30
	Comparison	1.47	1.41	1.40	1.38	1.39	1.37
SD	Treatment	.44	.44	.47	.51	.50	.48
	Comparison	.49	.50	.53	.53	.52	.51
Ν	Treatment	1302	1287	1198	1223	1195	1214
	Comparison	761	745	735	727	711	714

FREQUENCES OF NO INSTANCES OF INAPPROPRIATE ONLINE BEHAVIOR
BY TREATMENT AND TIME

		Time											
Statistic	Condition	1	2	3	4	5	6						
Frequencies	Treatment	25.8%	34.0%	36.1%	40.0%	44.7%	43.9%						
	Comparison	20.8%	28.5%	30.9%	36.0%	32.9%	35.3%						

DE	ACQU		CES BY TRE	-			NE
			_	Tim	e		
Statistic	Condition	1	2	3	4	5	6
Mean	Treatment	5.11	5.35	5.34	5.28	5.30	5.25
	Comparison	5.05	5.17	5.14	5.14	5.12	5.18
SD	Treatment	1.36	1.31	1.34	1.46	1.40	1.47
	Comparison	1.28	1.28	1.36	1.38	1.38	1.30
N	Treatment	1302	1284	1196	1224	1194	1212
	Comparison	759	742	736	730	711	710

# DESCRIPTIVE STATISTICS FOR COMFORT LEVEL WITH ONLINE

# APPENDIX 11: HLM MODELS

# **APPENDIX 11: HLM MODELS**

#### MEDIA

	Intelle	ctual Pro	operty Kn	owledge	e: Media S	Scale					
	Model A (Wi	thout Int	ensity								
	Measures)						Model B (Wi				
Fixed Effect	Coefficient	SE	t-ratio	df	р		Coefficient	SE	t-ratio	df	р
Intercept	0.617	0.018	33.672	108	*0.000		0.591	0.068	8.682	105	*0.000
intercept by											
Treatment/Comparison	0.183	0.017	11.086	108	*0.000		0.184	0.016	11.171	105	*0.000
Site 1	-0.085	0.022	-3.912	108	*0.000		-0.082	0.021	-3.844	105	*0.000
Site 2	-0.066	0.020	-3.331	108	*0.002		-0.062	0.020	-3.113	105	*0.000
Site 3	0.019	0.028	0.661	108	0.510		0.027	0.034	0.802	105	0.424
Site 4	-0.073	0.035	-2.089	108	0.039		-0.068	0.035	-1.950	105	0.053
Site 5	0.028	0.020	1.362	108	0.176		0.032	0.021	1.524	105	0.130
Average hours of curriculum							0.000	0.001	0.174	105	0.863
Total number of youth emp. activities							0.003	0.007	0.375	105	0.708
% of total activities implemented							0.013	0.060	0.215	105	0.831
Hours of curriculum	0.013	0.013	0.973	2083	0.331		0.013	0.013	0.978	2083	0.329
Grade	-0.013	0.008	-1.664	2083	0.096		-0.012	0.008	-1.445	2083	0.148
Age (from class mean)	0.011	0.015	0.724	2083	0.469		0.011	0.015	0.720	2083	0.471
Sex	-0.021	0.017	-1.255	2083	0.210		-0.021	0.017	-1.246	2083	0.213
Number computers at home	-0.013	0.011	-1.212	2083	0.226		-0.013	0.011	-1.216	2083	0.225
Computer skill	0.005	0.009	0.558	2083	0.576		0.005	0.009	0.566	2083	0.571
When started using Internet	0.002	0.004	0.418	2083	0.675		0.002	0.004	0.467	2083	0.640
Hours week Internet use	-0.001	0.002	-0.259	2083	0.796		-0.001	0.002	-0.260	2083	0.795
Parental Supervision	0.057	0.008	7.082	2083	*0.000		0.057	0.008	7.047	2083	*0.000
Comfort level with acquaintances	0.025	0.006	4.217	2083	*0.000		0.025	0.006	4.182	2083	*0.000
Previous knowledge internet safety	0.054	0.029	1.897	2083	0.058		0.055	0.029	1.935	2083	0.053
Online behavior	-0.101	0.013	-7.646	2083	*0.000		-0.101	0.013	-7.591	2083	*0.000
White	0.018	0.017	1.053	2083	0.293		0.018	0.017	1.045	2083	0.297
Black	-0.006	0.029	-0.197	2083	0.844		-0.006	0.029	-0.213	2083	0.831

	Intelle	ctual Pro	operty Kn	owledge	: Media S	Scale					
Hispanic	0.031	0.036	0.851	2083	0.395		0.030	0.036	0.819	2083	0.413
ime	0.005	0.004	1.124	2083	0.262		-0.031	0.019	-1.587	2083	0.112
ime by											
Treatment/Comparison	0.013	0.004	3.688	2083	*0.000		0.014	0.004	3.819	2083	*0.000
Site 1	-0.001	0.006	-0.091	2083	0.928		-0.002	0.006	-0.371	2083	0.711
Site 2	-0.003	0.005	-0.631	2083	0.528		-0.002	0.005	-0.384	2083	0.701
Site 3	-0.002	0.006	-0.379	2083	0.704		0.006	0.008	0.716	2083	0.474
Site 4	-0.010	0.008	-1.177	2083	0.240		-0.008	0.008	-0.946	2083	0.345
Site 5	0.006	0.006	1.055	2083	0.292		0.006	0.006	1.059	2083	0.290
Average hours of curriculum							0.000	0.000	1.313	2083	0.190
Total number of youth emp. activities							0.002	0.002	0.880	2083	0.379
% of total activities implemented							0.015	0.015	1.046	2083	0.296
Hours of curriculum	0.002	0.003	0.470	2083	0.638		0.002	0.003	0.477	2083	0.633
Grade	-0.002	0.002	-1.128	2083	0.260		-0.001	0.002	-0.636	2083	0.525
Age (from class mean)	-0.004	0.004	-0.933	2083	0.351		-0.004	0.004	-0.944	2083	0.346
Sex	-0.007	0.004	-1.910	2083	0.056		-0.007	0.004	-1.895	2083	0.058
Number computers at home	-0.002	0.003	-0.703	2083	0.482		-0.002	0.003	-0.737	2083	0.461
Computer skill	-0.005	0.002	-1.951	2083	0.051		-0.004	0.002	-1.944	2083	0.052
When started using Internet	0.000	0.001	0.226	2083	0.821		0.001	0.001	0.387	2083	0.698
Hours week Internet use	-0.001	0.001	-1.577	2083	0.115		-0.001	0.001	-1.578	2083	0.115
Parental Supervision	-0.001	0.002	-0.579	2083	0.562		-0.001	0.002	-0.580	2083	0.562
Comfort level with acquaintances	0.000	0.001	-0.277	2083	0.782		0.000	0.001	-0.298	2083	0.765

Hours week Internet use Parental Supervision Comfort level with acquaintances 0.000 0.001 0.000 0.001 -0.277 2083 0.782 -0.298 -2.789 0.006 0.006 -2.643 Previous knowledge internet safety -0.016 0.006 2083 -0.016 Online behavior 0.003 0.010 0.003 3.070 2083 0.003 0.010 3.099 0.096 White 0.001 0.005 0.114 2083 0.910 0.001 0.005 Black 0.013 0.007 1.880 2083 0.060 0.013 0.007 1.816 Hispanic 0.002 0.010 0.206 2083 0.837 0.001 0.010 0.124 -0.003 0.010 0.009 Time-squared 0.004 -0.802 2083 0.423 1.094 Time-squared by Treatment/Comparison 0.002 -5.001 -0.012 0.002 -5.016 2083 \*0.000 -0.012 Site 1 0.003 0.005 0.610 2083 0.541 0.005 0.005 0.932 Site 2 0.005 0.005 0.004 0.005 0.921 2083 0.358 0.934 Site 3 0.002 0.005 0.304 2083 0.761 0.000 0.006 -0.016 Site 4 0.001 0.006 0.217 0.828 0.002 0.006 0.382 2083

Time Time by

2083

2083

2083

2083

2083

2083

2083

2083

2083

2083

2083

\*0.009

\*0.002

0.924

0.069

0.901

0.275

\*0.000

0.352

0.351

0.987

0.702

	Intelle	ectual Pro	operty Kn	owledge	e: Media S	Scale					
Site 5	-0.005	0.005	-1.093	2083	0.275		-0.003	0.005	-0.653	2083	0.514
Average hours of curriculum							0.000	0.000	-1.526	2083	0.127
Total number of youth emp. activities							0.000	0.001	-0.001	2083	0.999
% of total activities implemented							-0.004	0.008	-0.476	2083	0.633
Hours of curriculum	0.000	0.002	0.027	2083	0.979		0.000	0.002	0.101	2083	0.920
Grade	0.001	0.001	0.501	2083	0.616		0.000	0.001	0.153	2083	0.879
Age (from class mean)	-0.006	0.002	- 2.888	2083	*0.004		-0.006	0.002	-2.871	2083	*0.005
Sex	0.005	0.002	2.270	2083	0.023		0.005	0.002	2.240	2083	0.025
Number computers at home	0.001	0.002	0.601	2083	0.547		0.001	0.002	0.644	2083	0.519
Computer skill	0.000	0.001	0.001	2083	0.999		0.000	0.001	-0.030	2083	0.976
When started using Internet	0.001	0.001	0.706	2083	0.480		0.000	0.001	0.617	2083	0.537
Hours week Internet use	0.000	0.000	1.399	2083	0.162		0.000	0.000	1.371	2083	0.171
Parental Supervision	-0.003	0.001	- 2.048	2083	0.040		-0.003	0.001	-2.010	2083	0.044
Comfort level with acquaintances	0.000	0.001	- 0.180	2083	0.858		0.000	0.001	-0.148	2083	0.882
Previous knowledge internet safety	0.000	0.005	0.036	2083	0.972		0.000	0.005	-0.019	2083	0.985
Online behavior	-0.001	0.002	- 0.339	2083	0.734		-0.001	0.002	-0.328	2083	0.743
White	-0.003	0.003	- 1.200	2083	0.231		-0.003	0.003	-1.160	2083	0.246
Black	-0.001	0.004	- 0.136	2083	0.893		0.000	0.004	-0.052	2083	0.959
Hispanic	-0.003	0.006	- 0.527	2083	0.598		-0.003	0.006	-0.527	2083	0.598
Random Effects	Variance	Chi	i-square	df	р		Variance	Chi	-square	df	p
Level 1 and Level 2											•
Intercept	0.060	6	128.792	1907	*0.000		0.060	6	139.627	1907	*0.000
Time	0.002	3	8057.630	2021	*0.000		0.002	3	050.262	2021	*0.000
Time-squared	0.000	2	385.564	2021	*0.000		0.000	2	381.624	2021	*0.000
level-1	0.069						0.069				
Level 3											

Intellectual Property Knowledge: Media Scale											
Intercept	0.030	149.064	108	*0.006		0.001	147.504		105	*0.004	
						Model B Dev	iance = 6	6378.73; #	parame	ters =	
Model A Deviance = 6386.98; # paramete					83						
*p < .01											

### INTERNET SAFETY

		Int	ernet Saf	ety Sca	le						
	Model A (Wi	thout Int	tensity M	easures	5)	I	Nodel B (Wi	th Intens	sity Meas	ures)	
Fixed Effect	Coefficient	SE	t-ratio	df	р	(	Coefficient	SE	t-ratio	df	р
Intercept	2.389	0.112	21.293	108	*0.000		2.331	0.221	10.532	105	*0.000
intercept by											
Treatment/Comparison	0.553	0.050	11.054	108	*0.000		0.555	0.048	11.516	105	*0.000
Site 1	-0.230	0.116	-1.984	108	0.049		-0.149	0.136	-1.101	105	0.274
Site 2	-0.087	0.110	-0.793	108	0.430		-0.106	0.123	-0.861	105	0.391
Site 3	-0.386	0.123	-3.132	108	*0.003		-0.367	0.152	-2.407	105	0.018
Site 4	-0.247	0.127	-1.946	108	0.054		-0.174	0.144	-1.203	105	0.232
Site 5	0.007	0.109	0.063	108	0.950		0.068	0.137	0.492	105	0.623
Average hours of curriculum							0.010	0.003	3.033	105	*0.004
Total number of youth emp. activities							0.074	0.027	2.705	105	*0.008
% of total activities implemented							-0.590	0.176	-3.351	105	*0.001
Hours of curriculum	0.098	0.038	2.595	2083	0.010		0.091	0.038	2.413	2083	0.016
Grade	-0.008	0.024	-0.325	2083	0.745		0.004	0.023	0.182	2083	0.856
Age (from class mean)	-0.091	0.033	-2.756	2083	*0.006		-0.091	0.033	-2.775	2083	*0.006
Sex	0.022	0.033	0.650	2083	0.515		0.026	0.033	0.775	2083	0.438
Number computers at home	0.032	0.030	1.051	2083	0.294		0.033	0.030	1.096	2083	0.274
Computer skill	0.201	0.022	9.179	2083	*0.000		0.201	0.022	9.185	2083	*0.000
When started using Internet	-0.032	0.012	-2.740	2083	*0.007		-0.033	0.012	-2.786	2083	*0.006
Hours week Internet use	0.004	0.004	0.841	2083	0.401		0.004	0.004	0.864	2083	0.388
Parental Supervision	0.056	0.023	2.484	2083	0.013		0.054	0.023	2.385	2083	0.017
Comfort level with acquaintances	0.048	0.012	3.999	2083	*0.000		0.047	0.012	3.869	2083	*0.000
Previous knowledge internet safety	0.556	0.058	9.645	2083	*0.000		0.561	0.057	9.778	2083	*0.000
Online behavior	0.105	0.030	3.529	2083	*0.001		0.102	0.030	3.439	2083	*0.001
White	-0.040	0.048	-0.849	2083	0.396		-0.042	0.048	-0.876	2083	0.381
Black	-0.256	0.070	-3.661	2083	*0.000		-0.253	0.070	-3.596	2083	*0.001
Hispanic	-0.241	0.083	-2.903	2083	*0.004		-0.238	0.081	-2.926	2083	*0.004
Time	0.021	0.019	1.082	108	0.282		-0.083	0.048	-1.735	105	0.085
Time by											
Treatment/Comparison	0.093	0.010	9.163	108	*0.000		0.093	0.010	9.760	105	*0.000

		Int	ernet Saf	ety Sca	le					
Site 1	-0.008	0.023	-0.360	108	0.719	-0.001	0.027	-0.024	105	0.981
Site 2	-0.021	0.021	-0.997	108	0.321	-0.021	0.025	-0.825	105	0.412
Site 3	-0.022	0.022	-1.016	108	0.312	0.006	0.032	0.192	105	0.849
Site 4	-0.013	0.024	-0.517	108	0.606	0.002	0.030	0.053	105	0.959
Site 5	-0.014	0.020	-0.680	108	0.498	-0.005	0.028	-0.168	105	0.868
Average hours of curriculum						0.003	0.001	3.195	105	*0.002
Total number of youth emp. activities						0.015	0.006	2.613	105	0.011
% of total activities implemented						-0.039	0.042	-0.917	105	0.362
Hours of curriculum	0.014	0.009	1.492	2083	0.136	0.013	0.009	1.408	2083	0.159
Grade	-0.020	0.006	-3.362	2083	*0.001	-0.015	0.006	-2.658	2083	*0.008
Age (from class mean)	-0.019	0.008	-2.301	2083	0.021	-0.020	0.008	-2.315	2083	0.021
Sex	-0.025	0.007	-3.456	2083	*0.001	-0.025	0.007	-3.388	2083	*0.001
Number computers at home	-0.005	0.007	-0.710	2083	0.478	-0.005	0.007	-0.690	2083	0.490
Computer skill	0.001	0.005	0.273	2083	0.785	0.001	0.005	0.282	2083	0.778
When started using Internet	-0.003	0.003	-1.024	2083	0.307	-0.002	0.003	-0.954	2083	0.341
Hours week Internet use	-0.001	0.001	-0.806	2083	0.421	-0.001	0.001	-0.818	2083	0.414
Parental Supervision	0.007	0.006	1.239	2083	0.216	0.007	0.006	1.218	2083	0.224
Comfort level with acquaintances	0.005	0.003	1.749	2083	0.080	0.005	0.003	1.665	2083	0.096
Previous knowledge internet safety	-0.022	0.014	-1.589	2083	0.112	-0.020	0.014	-1.485	2083	0.138
Online behavior	-0.037	0.007	-5.604	2083	*0.000	-0.038	0.007	-5.664	2083	*0.000
White	0.009	0.011	0.822	2083	0.411	0.009	0.011	0.815	2083	0.415
Black	-0.030	0.016	-1.818	2083	0.069	-0.030	0.017	-1.808	2083	0.070
Hispanic	-0.002	0.018	-0.130	2083	0.897	-0.003	0.018	-0.159	2083	0.874
Time-squared	-0.010	0.007	-1.434	108	0.154	-0.011	0.022	-0.494	105	0.622
Time-squared by										
			-					-		
Treatment/Comparison	-0.053	0.005	11.627	108	*0.000	-0.053	0.005	11.730	105	*0.000
Site 1	0.010	0.007	1.357	108	0.178	0.006	0.009	0.651	105	0.516
Site 2	0.002	0.008	0.283	108	0.778	0.006	0.009	0.643	105	0.521
Site 3	0.016	0.009	1.787	108	0.076	0.018	0.012	1.483	105	0.141
Site 4	0.019	0.012	1.544	108	0.125	0.016	0.013	1.277	105	0.205
Site 5	-0.009	0.008	-1.167	108	0.246	-0.011	0.010	-1.079	105	0.283
Average hours of curriculum						-0.001	0.000	-2.025	105	0.045
Total number of youth emp. activities						-0.004	0.003	-1.625	105	0.107

		Int	ernet Saf	ety Sca	le						
% of total activities implemented						0	.054	0.017	3.185	105	*0.002
Hours of curriculum	-0.011	0.007	-1.755	2083	0.079	-0	.010	0.006	-1.609	2083	0.107
Grade	0.010	0.003	3.950	2083	*0.000	0	.009	0.002	3.805	2083	*0.000
Age (from class mean)	0.008	0.005	1.689	2083	0.091	0	.008	0.005	1.719	2083	0.085
Sex	0.005	0.005	1.091	2083	0.276	0	.005	0.005	0.993	2083	0.321
Number computers at home	-0.001	0.004	-0.131	2083	0.896	-0	.001	0.004	-0.152	2083	0.880
Computer skill	0.004	0.003	1.240	2083	0.216	0	.004	0.003	1.246	2083	0.213
When started using Internet	-0.001	0.001	-0.527	2083	0.598	-0	.001	0.001	-0.405	2083	0.685
Hours week Internet use	0.000	0.001	0.068	2083	0.946	0	.000	0.001	0.041	2083	0.967
Parental Supervision	0.001	0.003	0.169	2083	0.866	0	.001	0.003	0.248	2083	0.804
Comfort level with acquaintances	-0.004	0.002	-2.383	2083	0.017	-0	.004	0.002	-2.295	2083	0.022
Previous knowledge internet safety	-0.015	0.009	-1.558	2083	0.119	-0	.015	0.009	-1.605	2083	0.108
Online behavior	0.007	0.004	1.735	2083	0.082	0	.008	0.004	1.844	2083	0.065
White	0.001	0.007	0.074	2083	0.941	0	.001	0.007	0.112	2083	0.912
Black	0.014	0.010	1.446	2083	0.148	0	.014	0.010	1.445	2083	0.149
Hispanic	0.008	0.010	0.745	2083	0.456	0	.006	0.010	0.650	2083	0.516
Random Effects	Variance	Chi-square		df	p	Varia	ance	Ch	i-square	df	p
Level 1 and Level 2					•				•		
Intercept	0.370	7074.839		1908	*0.000	0	.370	7331.635		1908	*0.000
Time	0.008	2987.361		1908	*0.000	0	.008	3000.698		1908	*0.000
Time-squared	0.001	2331.153		1908	*0.000	0	.001	2329.460		1908	*0.000
level-1	0.286					0	.286				
Level 3											
Intercept	0.032		254.896	108	*0.000	0	.025		221.678	105	*0.000
Time	0.002	238.494		108	*0.000	0	.001	216.138		105	*0.000
Time-squared	0.000	148.039		108	*0.007	0	.000	134.721		105	0.027
Model A Deviance = 23427.47; # parameters = 79						Model B Devia	nce =	23403.0	)6; # parar	neters =	88
*p < .01											

#### MANAGING RISK

Managing Risk Scale											
	Model A (Without Intensity Measures)						Model B (With Intensity Measures)				
Fixed Effect	Coefficient	SE	t-ratio	df	р		Coefficient	SE	t-ratio	df	р
Intercept	2.897	0.101	28.656	108	*0.000		2.660	0.166	16.034	105	*0.000
intercept by											
Treatment/Comparison	0.232	0.046	5.065	108	*0.000		0.228	0.045	5.053	105	*0.000
Site 1	-0.327	0.104	-3.142	108	*0.003		-0.373	0.110	-3.401	105	*0.001
Site 2	-0.301	0.107	-2.829	108	*0.006		-0.355	0.109	-3.244	105	*0.002
Site 3	-0.314	0.110	-2.853	108	*0.006		-0.329	0.124	-2.664	105	*0.009
Site 4	-0.015	0.150	-0.102	108	0.919		-0.061	0.154	-0.400	105	0.690
Site 5	-0.042	0.106	-0.398	108	0.691		-0.104	0.114	-0.914	105	0.363
Average hours of curriculum							0.011	0.003	4.346	105	*0.000
Total number of youth emp. activities							0.011	0.024	0.469	105	0.639
% of total activities implemented							-0.253	0.179	-1.414	105	0.160
Hours of curriculum	0.083	0.048	1.735	2083	0.082		0.074	0.049	1.505	2083	0.132
Grade	-0.018	0.022	-0.825	2083	0.410		-0.007	0.022	-0.330	2083	0.741
Age (from class mean)	-0.097	0.039	-2.497	2083	0.013		-0.098	0.039	-2.536	2083	0.012
Sex	-0.363	0.036	- 10.012	2083	*0.000		-0.357	0.036	-9.842	2083	*0.000
Number computers at home	0.001	0.034	0.018	2083	0.985		-0.001	0.034	-0.026	2083	0.980
Computer skill	0.049	0.026	1.887	2083	0.059		0.050	0.026	1.924	2083	0.054
When started using Internet	0.005	0.015	0.322	2083	0.747		0.005	0.015	0.320	2083	0.748
Hours week Internet use	-0.002	0.005	-0.418	2083	0.676		-0.002	0.005	-0.327	2083	0.744
Parental Supervision	0.036	0.028	1.269	2083	0.205		0.033	0.028	1.165	2083	0.244
Comfort level with acquaintances	0.139	0.015	9.401	2083	*0.000		0.137	0.015	9.105	2083	*0.000
Previous knowledge internet safety	0.589	0.078	7.554	2083	*0.000		0.596	0.078	7.666	2083	*0.000
Online behavior	-0.042	0.031	-1.325	2083	0.185		-0.046	0.031	-1.475	2083	0.140
White	0.010	0.058	0.167	2083	0.868		0.005	0.058	0.081	2083	0.936
Black	-0.166	0.089	-1.870	2083	0.061		-0.174	0.089	-1.943	2083	0.052
Hispanic	-0.362	0.110	-3.283	2083	*0.001		-0.354	0.109	-3.259	2083	*0.002
Time	-0.011	0.010	-1.106	2083	0.269		-0.050	0.034	-1.476	2083	0.140
Time by											

		N	lanaging	Risk Sc	ale					
Treatment/Comparison	0.019	0.008	2.530	2083	0.012	0.019	0.008	2.538	2083	0.012
Site 1	-0.006	0.014	-0.439	2083	0.660	-0.005	0.014	-0.403	2083	0.687
Site 2	0.020	0.013	1.532	2083	0.126	0.021	0.013	1.605	2083	0.108
Site 3	-0.003	0.013	-0.234	2083	0.815	0.007	0.016	0.435	2083	0.663
Site 4	0.015	0.015	1.030	2083	0.304	0.020	0.017	1.135	2083	0.257
Site 5	0.014	0.012	1.167	2083	0.244	0.017	0.013	1.312	2083	0.190
Average hours of curriculum						0.001	0.001	0.993	2083	0.321
Total number of youth emp. activities						0.004	0.005	0.822	2083	0.412
% of total activities implemented						0.005	0.032	0.151	2083	0.881
Hours of curriculum	0.004	0.009	0.439	2083	0.660	0.004	0.009	0.406	2083	0.684
Grade	-0.012	0.004	-2.717	2083	*0.007	-0.010	0.004	-2.376	2083	0.018
Age (from class mean)	-0.014	0.009	-1.697	2083	0.089	-0.015	0.009	-1.701	2083	0.089
Sex	-0.023	0.008	-2.977	2083	*0.003	-0.023	0.008	-2.952	2083	*0.004
Number computers at home	0.008	0.007	1.168	2083	0.243	0.008	0.007	1.168	2083	0.243
Computer skill	0.012	0.005	2.271	2083	0.023	0.012	0.005	2.277	2083	0.023
When started using Internet	0.002	0.003	0.885	2083	0.377	0.003	0.003	0.968	2083	0.334
Hours week Internet use	-0.001	0.001	-0.625	2083	0.532	-0.001	0.001	-0.615	2083	0.538
Parental Supervision	0.003	0.007	0.398	2083	0.690	0.003	0.007	0.386	2083	0.699
Comfort level with acquaintances	0.002	0.003	0.547	2083	0.584	0.002	0.003	0.524	2083	0.600
Previous knowledge internet safety	-0.008	0.015	-0.519	2083	0.603	-0.007	0.015	-0.461	2083	0.645
Online behavior	-0.021	0.006	-3.603	2083	*0.001	-0.021	0.006	-3.565	2083	*0.001
White	0.003	0.012	0.223	2083	0.823	0.003	0.012	0.215	2083	0.830
Black	-0.047	0.016	-2.913	2083	*0.004	-0.047	0.016	-2.917	2083	*0.004
Hispanic	-0.002	0.019	-0.096	2083	0.924	-0.003	0.019	-0.134	2083	0.893
Time-squared	0.000	0.008	0.010	108	0.992	0.005	0.016	0.319	105	0.750
Time-squared by										
Treatment/Comparison	-0.021	0.005	-4.107	108	*0.000	-0.021	0.005	-4.059	105	*0.000
Site 1	0.006	0.009	0.679	108	0.499	0.010	0.010	1.045	105	0.299
Site 2	0.009	0.010	0.893	108	0.374	0.012	0.010	1.218	105	0.226
Site 3	0.012	0.010	1.239	108	0.218	0.015	0.011	1.434	105	0.154
Site 4	-0.008	0.011	-0.720	108	0.473	-0.004	0.012	-0.295	105	0.769
Site 5	-0.014	0.009	-1.556	108	0.122	-0.009	0.010	-0.940	105	0.350
Average hours of curriculum						0.000	0.000	-1.627	105	0.106
Total number of youth emp. activities						0.001	0.003	0.401	105	0.689

		N	lanaging	Risk Sc	ale					
% of total activities implemented						0.010	0.019	0.493	105	0.623
Hours of curriculum	-0.012	0.006	-1.874	2083	0.061	-0.011	0.006	-1.822	2083	0.068
Grade	0.009	0.003	3.590	2083	*0.001	0.009	0.003	3.457	2083	*0.001
Age (from class mean)	0.005	0.005	1.071	2083	0.285	0.005	0.005	1.078	2083	0.282
Sex	0.007	0.004	1.672	2083	0.094	0.007	0.004	1.645	2083	0.100
Number computers at home	-0.004	0.004	-1.109	2083	0.268	-0.004	0.004	-1.093	2083	0.275
Computer skill	0.003	0.003	0.996	2083	0.320	0.003	0.003	0.992	2083	0.322
When started using Internet	-0.003	0.002	-1.842	2083	0.065	-0.003	0.002	-1.789	2083	0.073
Hours week Internet use	0.000	0.001	-0.275	2083	0.783	0.000	0.001	-0.307	2083	0.759
Parental Supervision	0.003	0.003	0.892	2083	0.373	0.003	0.003	0.929	2083	0.354
Comfort level with acquaintances	0.003	0.002	1.625	2083	0.104	0.003	0.002	1.643	2083	0.100
Previous knowledge internet safety	-0.028	0.010	-2.892	2083	*0.004	-0.028	0.010	-2.881	2083	*0.004
Online behavior	0.005	0.004	1.356	2083	0.175	0.005	0.004	1.388	2083	0.165
White	0.003	0.006	0.566	2083	0.571	0.004	0.006	0.583	2083	0.560
Black	0.002	0.011	0.231	2083	0.817	0.003	0.011	0.259	2083	0.796
Hispanic	0.007	0.010	0.728	2083	0.467	0.006	0.010	0.667	2083	0.505
Random Effects	Variance	Chi	-square	df	р	Variance	Chi	-square	df	р
Level 1 and Level 2										
Intercept	0.664	13	144.808	1907	*0.000	0.662	13	375.069	1907	*0.000
Time	0.015	4	055.203	2021	*0.000	0.015	4	053.246	2021	*0.000
Time-squared	0.003	2	809.554	1907	*0.000	0.003	2	803.542	1907	*0.000
level-1	0.261					0.261				
Level 3										
Intercept	0.013		152.612	108	*0.003	0.010		140.830	105	0.011
Time	0.010		132.821	108	0.053					
Time-squared						0.000		131.162	105	0.043
Model A Deviance = 24803.93; # param	eters = 76					Model B Dev	iance = 2	4790.30;	# parame	eters = 85
*p < .01										

### THEFT

	Intelle	ctual Pro	operty Kn	owledge	: Theft S	cale					
	Model A (Wi Measures)	thout Int	ensity				Model B (Wi	th Intens	sity Meas	sures)	
Fixed Effect	Coefficient	SE	t-ratio	df	р		Coefficient	SE	t- ratio	df	р
Intercept	0.649	0.046	14.112	108	*0.000		0.598	0.086	6.947	105	*0.000
intercept by											
Treatment/Comparison	0.117	0.022	5.328	108	*0.000		0.118	0.022	5.435	105	*0.000
Site 1	-0.095	0.046	-2.076	108	0.040		-0.073	0.049	- 1.480	105	0.142
Site 2	-0.125	0.045	-2.765	108	*0.007		-0.123	0.045	- 2.705	105	*0.008
Site 3	-0.122	0.044	-2.775	108	*0.007		-0.102	0.053	- 1.931	105	0.056
Site 4	0.016	0.055	0.298	108	0.766		0.041	0.060	0.691	105	0.491
Site 5	-0.002	0.049	-0.036	108	0.972		0.019	0.055	0.346	105	0.730
Average hours of curriculum							0.002	0.001	1.684	105	0.095
Total number of youth emp. activities							0.020	0.012	1.710	105	0.090
% of total activities implemented							-0.104	0.078	- 1.332	105	0.186
Hours of curriculum	0.037	0.019	1.986	2082	0.047		0.036	0.019	1.910	2082	0.056
Grade	-0.002	0.009	-0.247	2082	0.805		0.001	0.010	0.154	2082	0.878
Age (from class mean)	-0.041	0.015	-2.806	2082	*0.006		-0.041	0.015	- 2.813	2082	*0.005
Sex	-0.083	0.016	-5.310	2082	*0.000		-0.082	0.016	- 5.264	2082	*0.000
Number computers at home	0.020	0.011	1.789	2082	0.073		0.021	0.011	1.805	2082	0.071
Computer skill	0.034	0.010	3.439	2082	*0.001		0.033	0.010	3.426	2082	*0.001
When started using Internet	0.000	0.005	0.022	2082	0.983		0.000	0.005	0.017	2082	0.987
Hours week Internet use	0.001	0.002	0.735	2082	0.462		0.001	0.002	0.728	2082	0.467
Parental Supervision	0.006	0.010	0.634	2082	0.526		0.006	0.010	0.596	2082	0.551
Comfort level with acquaintances	0.028	0.006	4.830	2082	*0.000		0.027	0.006	4.795	2082	*0.000
Previous knowledge internet safety	0.136	0.025	5.482	2082	*0.000		0.137	0.025	5.522	2082	*0.000
Online behavior	-0.030	0.013	-2.332	2082	0.020		-0.030	0.013	-	2082	0.018

	Intelle	ctual Pro	perty Kn	owledge	: Theft S	cale					
									2.364		
White	0.022	0.024	0.900	2082	0.369		0.021	0.024	0.877	2082	0.381
Black	-0.100	0.037	-2.720	2082	*0.007		-0.101	0.037	- 2.719	2082	*0.007
Hispanic	-0.087	0.039	-2.252	2082	0.024		-0.087	0.039	- 2.260	2082	0.024
Time	-0.005	0.007	-0.703	108	0.483		0.001	0.018	0.075	105	0.940
Time by											
Treatment/Comparison	0.008	0.005	1.719	108	0.088		0.008	0.004	1.850	105	0.067
Site 1	-0.012	0.007	-1.586	108	0.115		-0.006	0.009	- 0.609	105	0.544
Site 2	-0.005	0.007	-0.619	108	0.537		-0.004	0.008	- 0.492	105	0.624
Site 3	-0.005	0.010	-0.480	108	0.632		-0.004	0.012	- 0.308	105	0.759
Site 4	0.005	0.011	0.428	108	0.669		0.010	0.012	0.819	105	0.415
Site 5	-0.005	0.008	-0.631	108	0.529		0.001	0.010	0.062	105	0.951
Average hours of curriculum							0.000	0.000	0.500	105	0.618
Total number of youth emp. activities							0.004	0.002	1.676	105	0.096
% of total activities implemented							-0.025	0.016	- 1.516	105	0.132
Hours of curriculum	-0.015	0.004	-3.620	2082	*0.001		-0.015	0.004	- 3.638	2082	*0.001
Grade	-0.006	0.002	-2.632	2082	*0.009		-0.006	0.002	- 2.528	2082	0.012
Age (from class mean)	-0.006	0.003	-1.854	2082	0.063		-0.006	0.003	- 1.836	2082	0.066
Sex	-0.002	0.004	-0.626	2082	0.531		-0.002	0.004	- 0.621	2082	0.535
Number computers at home	0.002	0.003	0.659	2082	0.510		0.002	0.003	0.708	2082	0.479
Computer skill	0.006	0.002	2.925	2082	*0.004		0.006	0.002	2.892	2082	*0.004
When started using Internet	0.000	0.001	0.073	2082	0.942		0.000	0.001	0.029	2082	0.977
Hours week Internet use	0.000	0.000	-0.687	2082	0.492		0.000	0.000	- 0.707	2082	0.479
Parental Supervision	-0.003	0.002	-1.112	2082	0.267		-0.003	0.002	- 1.136	2082	0.256
Comfort level with acquaintances	-0.003	0.002	-1.535	2082	0.125		-0.003	0.002	- 1.522	2082	0.128

	Intelle	ctual Pro	operty Kn	owledge	: Theft S	cale					
							0.040		-		
Previous knowledge internet safety	-0.011	0.008	-1.367	2082	0.172		-0.010	0.008	1.360	2082	0.174
Online behavior	-0.002	0.003	-0.594	2082	0.552		-0.002	0.003	0.606	2082	0.544
White	-0.003	0.005	-0.610	2082	0.542		-0.003	0.005	- 0.616	2082	0.538
VVIIIte	-0.003	0.005	-0.610	2062	0.542		-0.003	0.005	0.010	2062	0.536
Black	-0.012	0.008	-1.558	2082	0.119		-0.012	0.008	1.496	2082	0.135
	-0.005	0.010	-0.528	2082	0.597		-0.005	0.010	- 0.522	2082	0.601
Time-squared	0.003	0.004	0.705	108	0.482		0.008	0.010	0.763	105	0.447
Time-squared by	0.000	0.001	000		0.102		0.000		0.1.00		
									-		
Treatment/Comparison	-0.014	0.003	-5.160	108	*0.000		-0.014	0.003	5.133	105	*0.000
Site 1	0.010	0.004	2.264	108	0.026		0.012	0.005	2.611	105	0.011
Site 2	0.005	0.004	1.180	108	0.241		0.005	0.005	1.184	105	0.239
Site 3	0.003	0.004	0.674	108	0.501		0.003	0.006	0.529	105	0.597
Site 4	-0.003	0.007	-0.396	108	0.693		0.000	0.008	- 0.060	105	0.953
Site 5	-0.005	0.004	-1.113	108	0.269		-0.003	0.005	- 0.504	105	0.615
Average hours of curriculum							0.000	0.000	- 0.327	105	0.744
Total number of youth emp. activities							0.001	0.001	0.811	105	0.419
% of total activities implemented							-0.007	0.010	0.678	105	0.499
Hours of curriculum	-0.004	0.003	-1.444	2082	0.149		-0.004	0.003	- 1.458	2082	0.145
Grade	0.004	0.001	2.592	2082	*0.010		0.004	0.001	2.410	2082	0.016
Age (from class mean)	0.001	0.002	0.564	2082	0.573		0.001	0.002	0.571	2082	0.567
Sex	0.006	0.003	2.384	2082	0.017		0.006	0.003	2.402	2082	0.017
Number computers at home	0.001	0.002	0.547	2082	0.584		0.001	0.002	0.583	2082	0.559
Computer skill	0.000	0.001	0.148	2082	0.883		0.000	0.001	0.098	2082	0.922
When started using Internet	0.000	0.001	-0.153	2082	0.879		0.000	0.001	- 0.214	2082	0.831
Hours week Internet use	0.000	0.000	-0.105	2082	0.917		0.000	0.000	- 0.132	2082	0.896
Parental Supervision	0.002	0.002	1.341	2082	0.180		0.002	0.002	1.330	2082	0.184

	Intelle	ctual Pro	perty Kn	owledge	: Theft So	ale					
									-		
Comfort level with acquaintances	-0.001	0.001	-1.207	2082	0.228		-0.001	0.001	1.213	2082	0.226
Previous knowledge internet safety	0.003	0.004	0.673	2082	0.501		0.003	0.004	0.674	2082	0.500
Online behavior	-0.001	0.002	-0.551	2082	0.581		-0.001	0.002	- 0.557	2082	0.577
White	0.000	0.004	0.098	2082	0.923		0.000	0.004	0.093	2082	0.926
Black	0.008	0.005	1.590	2082	0.112		0.008	0.005	1.658	2082	0.097
Hispanic	-0.002	0.006	-0.345	2082	0.730		-0.002	0.006	- 0.355	2082	0.723
Random Effects	Variance	Chi	-square	df	р		Variance	Chi-	square	df	р
Level 1 and Level 2											
Intercept	0.056	5	001.849	1902	*0.000		0.056	50	026.012	1902	*0.000
Time	0.001	2	509.002	1902	*0.000		0.001	25	512.346	1902	*0.000
Time-squared	0.000	2	296.034	1902	*0.000		0.000	22	295.326	1902	*0.000
level-1	0.078						0.078				
Level 3											
Intercept	0.006		256.917	108	*0.000		0.006	2	245.595	105	*0.000
Time	0.000		177.136	108	*0.000		0.000	1	71.620	105	*0.000
Time-squared	0.000		145.969	108	*0.009		0.000	-	45.260	105	*0.006
Model A Deviance = 7148.39; # paramet	ers = 79						Model B Dev 88	Model B Deviance = 7135.60; # parameters			
*p < .01											

#### INAPPROPRIATE ONLINE BEHAVIOR

		Ina	appropri	ate Online	e Behav	ior Scale					
		Model A (With	nout Inten	sity Measu	ures)		Model B (With	Intensity	Measures	)	
Fixed	Effect	Coefficient	SE	t-ratio	df	р	Coefficient	SE	t-ratio	df	р
Interce	ept	1.389	0.029	48.694	108	*0.000	1.571	0.090	17.468	105	*0.000
interce	ept by										
	Treatment/Comparison	-0.038	0.021	-1.814	108	0.072	-0.040	0.020	-1.980	105	0.050
	Site 1	-0.022	0.040	-0.541	108	0.589	0.009	0.037	0.240	105	0.811
	Site 2	0.028	0.034	0.830	108	0.409	0.016	0.030	0.529	105	0.597
	Site 3	-0.082	0.033	-2.506	108	0.014	-0.120	0.042	-2.853	105	*0.006
	Site 4	-0.015	0.041	-0.369	108	0.712	-0.004	0.042	-0.104	105	0.918
	Site 5	-0.022	0.033	-0.669	108	0.504	-0.005	0.032	-0.168	105	0.867
	Average hours of curriculum						0.000	0.001	-0.305	105	0.761
	Total number of youth emp. activitie	S					0.011	0.011	1.017	105	0.312
	% of total activities implemented						-0.229	0.093	-2.470	105	0.015
	Hours of curriculum	0.029	0.018	1.642	2083	0.100	0.027	0.017	1.548	2083	0.121
	Grade	0.024	0.011	2.146	2083	0.032	0.021	0.012	1.773	2083	0.076
	Age (from class mean)	0.030	0.019	1.586	2083	0.113	0.030	0.019	1.585	2083	0.113
	Sex	0.085	0.020	4.163	2083	*0.000	0.087	0.020	4.253	2083	*0.000
	Number computers at home	0.015	0.015	1.030	2083	0.304	0.016	0.015	1.084	2083	0.279
	Computer skill	0.012	0.012	0.983	2083	0.326	0.011	0.012	0.903	2083	0.367
	When started using Internet	-0.015	0.006	-2.683	2083	*0.008	-0.017	0.006	-3.014	2083	*0.003
	Hours week Internet use	0.003	0.003	0.941	2083	0.347	0.003	0.003	0.961	2083	0.337
	Parental Supervision	-0.050	0.012	-4.302	2083	*0.000	-0.051	0.012	-4.384	2083	*0.000
	Comfort level with acquaintances	-0.035	0.008	-4.302	2083	*0.000	-0.035	0.008	-4.396	2083	*0.000
	Previous knowledge internet										
	safety	-0.035	0.036	-0.975	2083	0.330	-0.037	0.036	-1.026	2083	0.305
	Online behavior	0.207	0.017	12.336	2083	*0.000	0.205	0.017	12.250	2083	*0.000
	White	0.026	0.028	0.922	2083	0.357	0.025	0.028	0.886	2083	0.376
	Black	-0.004	0.040	-0.098	2083	0.923	0.000	0.041	0.009	2083	0.993
	Hispanic	0.007	0.043	0.154	2083	0.878	0.011	0.043	0.265	2083	0.791
Time		-0.016	0.006	-2.897	2083	*0.004	0.003	0.019	0.175	2083	0.861
Time b											
	Treatment/Comparison	-0.001	0.005	-0.116	2083	0.909	-0.001	0.004	-0.121	2083	0.904

	Ina	appropri	ate Onlin	e Behavi	ior Scale	1					
Site 1	0.000	0.007	-0.063	2083	0.950		0.009	0.007	1.298	2083	0.195
Site 2	0.000	0.007	-0.050	2083	0.961		-0.001	0.006	-0.231	2083	0.818
Site 3	0.000	0.008	-0.004	2083	0.996		-0.001	0.009	-0.096	2083	0.924
Site 4	0.006	0.010	0.582	2083	0.561		0.013	0.010	1.380	2083	0.168
Site 5	0.010	0.007	1.322	2083	0.187		0.017	0.008	2.252	2083	0.024
Average hours of curriculum							0.000	0.000	0.640	2083	0.522
Total number of youth emp. activities	3						0.006	0.002	2.407	2083	0.016
% of total activities implemented							-0.049	0.015	-3.205	2083	*0.002
Hours of curriculum	0.007	0.004	1.639	2083	0.101		0.006	0.004	1.532	2083	0.125
Grade	0.000	0.003	-0.006	2083	0.995		0.000	0.003	0.061	2083	0.952
Age (from class mean)	-0.002	0.004	-0.517	2083	0.604		-0.002	0.004	-0.519	2083	0.603
Sex	0.006	0.004	1.447	2083	0.148		0.007	0.004	1.516	2083	0.130
Number computers at home	-0.005	0.004	-1.301	2083	0.194		-0.005	0.004	-1.268	2083	0.205
Computer skill	0.003	0.003	1.076	2083	0.282		0.003	0.003	0.987	2083	0.324
When started using Internet	-0.001	0.002	-0.606	2083	0.544		-0.001	0.002	-0.766	2083	0.444
Hours week Internet use	0.002	0.001	2.503	2083	0.013		0.002	0.001	2.534	2083	0.012
Parental Supervision	0.002	0.003	0.556	2083	0.578		0.001	0.003	0.486	2083	0.626
Comfort level with acquaintances	0.002	0.002	1.430	2083	0.153		0.002	0.002	1.377	2083	0.169
Previous knowledge internet											
safety	-0.002	0.008	-0.246	2083	0.806		-0.002	0.008	-0.252	2083	0.801
Online behavior	-0.028	0.004	-7.357	2083	*0.000		-0.029	0.004	-7.440	2083	*0.000
White	-0.002	0.005	-0.294	2083	0.769		-0.002	0.005	-0.323	2083	0.746
Black	-0.011	0.010	-1.176	2083	0.240		-0.010	0.010	-1.062	2083	0.289
Hispanic	-0.016	0.010	-1.564	2083	0.118		-0.015	0.010	-1.551	2083	0.121
Time-squared	0.010	0.004	2.333	2083	0.020		0.000	0.012	0.020	2083	0.984
Time-squared by											
Treatment/Comparison	-0.002	0.003	-0.874	2083	0.383		-0.002	0.003	-0.867	2083	0.386
Site 1	-0.003	0.005	-0.646	2083	0.518		-0.007	0.005	-1.470	2083	0.142
Site 2	-0.009	0.005	-1.873	2083	0.061	<u> </u>	-0.009	0.004	-2.033	2083	0.042
Site 3	-0.002	0.005	-0.483	2083	0.629		-0.001	0.005	-0.217	2083	0.828
Site 4	-0.005	0.005	-1.023	2083	0.307		-0.008	0.005	-1.561	2083	0.118
Site 5	-0.003	0.005	-0.602	2083	0.547		-0.006	0.005	-1.229	2083	0.219
Average hours of curriculum							0.000	0.000	-0.411	2083	0.681
Total number of youth emp. activities	3						-0.002	0.001	-1.427	2083	0.154

1		In	annronri	ate Onlin	e Rehavi	ior Scale					
	% of total activities implemented				e Dellavi		0.021	0.011	1.832	2083	0.067
	Hours of curriculum	-0.003	0.003	-1.131	2083	0.259	-0.003	0.003	-1.027	2083	0.305
	Grade	0.000	0.001	-0.344	2083	0.731	0.000	0.001	-0.339	2083	0.735
	Age (from class mean)	-0.001	0.002	-0.470	2083	0.638	-0.001	0.002	-0.461	2083	0.644
	Sex	-0.003	0.003	-1.061	2083	0.289	-0.003	0.003	-1.112	2083	0.267
	Number computers at home	-0.002	0.002	-1.043	2083	0.297	-0.002	0.002	-1.065	2083	0.287
	Computer skill	0.001	0.002	0.453	2083	0.650	0.001	0.002	0.498	2083	0.618
	When started using Internet	0.001	0.001	1.014	2083	0.311	0.001	0.001	1.148	2083	0.252
	Hours week Internet use	0.000	0.000	0.482	2083	0.629	0.000	0.000	0.492	2083	0.622
	Parental Supervision	0.001	0.002	0.381	2083	0.703	0.001	0.002	0.448	2083	0.654
	Comfort level with acquaintances	-0.002	0.001	-2.350	2083	0.019	-0.002	0.001	-2.306	2083	0.021
	Previous knowledge internet										
	safety	0.006	0.005	1.286	2083	0.199	0.006	0.005	1.285	2083	0.199
	Online behavior	0.002	0.002	1.184	2083	0.237	0.003	0.002	1.254	2083	0.210
	White	-0.002	0.004	-0.396	2083	0.691	-0.002	0.004	-0.383	2083	0.701
	Black	0.002	0.006	0.347	2083	0.728	0.002	0.006	0.274	2083	0.784
	Hispanic	0.002	0.007	0.277	2083	0.782	0.002	0.007	0.246	2083	0.806
Rand	om Effects	Variance	Chi	i-square	df	a	Variance	Ch	i-square	df	a
-	1 and Level 2	Variance		Square	u	<u>Р</u>	Vanance			u	Y
	Intercept	0.113	8	084.620	1906	*0.000	0.113	6	3090.292	1906	*0.000
	Time	0.003	-	250.056	2020	*0.000	0.003		3231.337	2020	*0.000
	Time-squared	0.000		443.206	2020	*0.000	0.000		436.303	2020	*0.000
	level-1	0.090					0.090				
Level											
	Intercept	0.000		125.947	108	0.114	0.000		121.198	105	0.134
	Model A Deviance = 9902.59; # para	ameters = 74					Model B Devi	iance – º	1881 28 <sup>.</sup> #	naramet	ers = 83
	*p < .01	amotoro – 74							,001.20, #	paramet	513 - 00

### COMFORT LEVEL WITH ONLINE ACQUAINTANCES

#### **Comfort Level With Online Acquaintances Scale**

	Com	fort Leve	el With On	line Acc	uaintances	Scale				
	Model A (Wi	thout Int	ensity Me	asures)		Model B (Wi	th Intensi	ty Measu	res)	
Fixed Effect	Coefficient	SE	t-ratio	df	р	Coefficient	SE	t-ratio	df	р
Intercept	5.325	0.096	55.285	108	*0.000	5.038	0.223	22.573	105	*0.000
intercept by										
Treatment/Comparison	0.209	0.061	3.433	108	*0.001	0.204	0.061	3.341	105	*0.002
Site 1	-0.289	0.103	-2.813	108	*0.006	-0.367	0.139	-2.648	105	*0.010
Site 2	-0.297	0.104	-2.865	108	0.005	-0.358	0.128	-2.802	105	*0.006
Site 3	-0.262	0.122	-2.153	108	0.033	-0.286	0.143	-2.010	105	0.047
Site 4	0.033	0.153	0.218	108	0.828	-0.042	0.179	-0.235	105	0.814
Site 5	-0.090	0.093	-0.975	108	0.332	-0.186	0.132	-1.414	105	0.160
Average hours of curriculum						0.013	0.004	3.296	105	*0.002
Total number of youth emp. activities						-0.005	0.029	-0.167	105	0.868
% of total activities implemented						-0.209	0.204	-1.025	105	0.308
Hours of curriculum	0.062	0.057	1.085	2084	0.278	0.051	0.056	0.912	2084	0.362
Grade	-0.145	0.032	-4.583	2084	*0.000	-0.134	0.031	-4.272	2084	*0.00
Age (from class mean)	-0.195	0.047	-4.107	2084	*0.000	-0.196	0.047	-4.145	2084	*0.00
Sex	-0.373	0.053	-6.986	2084	*0.000	-0.367	0.053	-6.939	2084	*0.00
Number computers at home	-0.017	0.045	-0.373	2084	0.709	-0.018	0.045	-0.410	2084	0.682
Computer skill	0.022	0.037	0.586	2084	0.557	0.023	0.037	0.625	2084	0.532
When started using Internet	0.014	0.020	0.675	2084	0.499	0.014	0.020	0.673	2084	0.501
Hours week Internet use	0.005	0.007	0.739	2084	0.460	0.005	0.007	0.826	2084	0.409
Parental Supervision	0.062	0.034	1.810	2084	0.070	0.060	0.034	1.743	2084	0.08
Previous knowledge internet safety	0.227	0.117	1.947	2084	0.051	0.233	0.117	1.993	2084	0.046
Online behavior	-0.319	0.045	-7.040	2084	*0.000	-0.323	0.044	-7.295	2084	*0.00
White	0.069	0.065	1.050	2084	0.294	0.060	0.065	0.924	2084	0.356
Black	0.012	0.099	0.123	2084	0.903	-0.002	0.100	-0.022	2084	0.983
Hispanic	-0.390	0.161	-2.432	2084	0.015	-0.382	0.159	-2.400	2084	0.017
Time	-0.007	0.016	-0.405	108	0.686	-0.015	0.067	-0.217	105	0.829
Time by										
Treatment/Comparison	0.001	0.013	0.072	108	0.943	0.002	0.013	0.150	105	0.881
Site 1	0.021	0.022	0.962	108	0.339	0.025	0.024	1.065	105	0.290
Site 2	0.032	0.021	1.501	108	0.136	0.042	0.024	1.698	105	0.092
Site 3	0.023	0.028	0.822	108	0.413	0.035	0.037	0.961	105	0.339

	Com	fort Leve	el With Or	line Acq	uaintand	es Scal	е				
Site 4	0.041	0.029	1.443	108	0.152		0.049	0.032	1.553	105	0.123
Site 5	-0.007	0.020	-0.335	108	0.738		0.002	0.024	0.099	105	0.922
Average hours of curriculum							-0.001	0.001	-1.000	105	0.320
Total number of youth emp.							0.000	0.007	0.050	405	0.054
activities							0.000	0.007	-0.059	105	0.954
% of total activities implemented							0.064	0.063	1.017	105	0.312
Hours of curriculum	-0.011	0.016	-0.735	2084	0.462		-0.010	0.015	-0.653	2084	0.513
Grade	-0.045	0.007	-6.397	2084	*0.000		-0.046	0.007	-6.333	2084	*0.000
Age (from class mean)	-0.017	0.013	-1.314	2084	0.189		-0.017	0.013	-1.299	2084	0.194
Sex	0.001	0.015	0.042	2084	0.967		0.000	0.015	-0.020	2084	0.984
Number computers at home	0.005	0.011	0.450	2084	0.652		0.005	0.011	0.458	2084	0.646
Computer skill	0.009	0.009	0.990	2084	0.323		0.009	0.009	0.989	2084	0.323
When started using Internet	0.008	0.005	1.587	2084	0.112		0.009	0.005	1.641	2084	0.101
Hours week Internet use	-0.001	0.002	-0.514	2084	0.607		-0.001	0.002	-0.545	2084	0.586
Parental Supervision	-0.003	0.010	-0.277	2084	0.782		-0.002	0.010	-0.227	2084	0.821
Previous knowledge internet safety	-0.063	0.026	-2.408	2084	0.016		-0.063	0.026	-2.434	2084	0.015
Online behavior	0.018	0.011	1.599	2084	0.110		0.018	0.011	1.657	2084	0.097
White	-0.014	0.016	-0.906	2084	0.365		-0.013	0.016	-0.851	2084	0.395
Black	-0.015	0.029	-0.501	2084	0.616		-0.014	0.029	-0.477	2084	0.633
Hispanic	0.063	0.033	1.894	2084	0.058		0.061	0.033	1.837	2084	0.066
Time-squared	-0.002	0.007	-0.340	11737	0.734		0.031	0.030	1.014	11728	0.311
Time-squared by											
Treatment/Comparison	-0.018	0.007	-2.428	11737	0.015		-0.018	0.007	-2.424	11728	0.016
Site 1	-0.013	0.008	-1.574	11737	0.115		-0.005	0.010	-0.496	11728	0.619
Site 2	0.014	0.009	1.627	11737	0.103		0.017	0.010	1.619	11728	0.105
Site 3	0.009	0.015	0.596	11737	0.551		0.008	0.018	0.426	11728	0.669
Site 4	-0.033	0.012	-2.625	11737	*0.009		-0.026	0.015	-1.771	11728	0.076
Site 5	-0.015	0.008	-1.866	11737	0.062		-0.008	0.010	-0.747	11728	0.455
Average hours of curriculum							-0.001	0.001	-1.309	11728	0.191
Total number of youth emp.											
activities							0.002	0.003	0.528	11728	0.597
% of total activities implemented							-0.011	0.025	-0.419	11728	0.675
Hours of curriculum	0.000	0.009	-0.023	11737	0.982		0.001	0.009	0.056	11728	0.956
Grade	0.011	0.004	2.788	11737	*0.006		0.010	0.004	2.422	11728	0.016
Age (from class mean)	0.008	0.008	1.131	11737	0.258		0.009	0.007	1.142	11728	0.254

	Com	fort Leve	With Or	nline Acc	uaintanc	ces Sca	le				
Sex	0.004	0.008	0.522	11737	0.601		0.004	0.008	0.472	11728	0.637
Number computers at home	-0.001	0.007	-0.083	11737	0.934		0.000	0.007	-0.052	11728	0.959
Computer skill	0.011	0.005	2.034	11737	0.042		0.011	0.005	1.997	11728	0.046
When started using Internet	-0.003	0.003	-1.139	11737	0.255		-0.003	0.003	-1.201	11728	0.230
Hours week Internet use	-0.001	0.001	-0.453	11737	0.650		-0.001	0.001	-0.490	11728	0.624
Parental Supervision	0.009	0.005	1.714	11737	0.086		0.009	0.005	1.727	11728	0.084
Previous knowledge internet safety	0.028	0.017	1.636	11737	0.102		0.027	0.017	1.593	11728	0.111
Online behavior	-0.005	0.007	-0.675	11737	0.499		-0.004	0.007	-0.670	11728	0.502
White	-0.004	0.011	-0.396	11737	0.692		-0.004	0.011	-0.365	11728	0.715
Black	-0.027	0.015	-1.792	11737	0.073		-0.026	0.015	-1.709	11728	0.087
Hispanic	0.005	0.019	0.261	11737	0.794		0.004	0.019	0.232	11728	0.817
Random Effects	Variance	Chi	-square	df	р		Variance	Chi	-square	df	р
Level 1 and Level 2			•						•		
Intercept	0.690	9	800.918	1942	*0.000		0.68991	10031	.27737	1942	*0.000
Time	0.168	3	092.612	1942	*0.000		0.0283	3094	1.06148	1942	*0.000
level-1	0.930						0.93				
Level 3											
Intercept	0.014		153.469	108	*0.003		0.00098	142	2.48869	105	0.009
Time	0.001		141.778	108	0.016		0.00067	139	9.46393	105	0.014
Model A Deviance = 36892.75; # para	meters = 70					Model	B Deviance =	36877.09;	# parame	eters = 79	)
*p < .01											

#### **PREDATOR IDENTIFICATION**

		Preda	tor Identi	fication	Scale						
	Model A (Wi Measures)	thout Int	ensity			r	Model B (Wi	th Intens	ity Measu	ures)	
Fixed Effect	Coefficient	SE	t-ratio	df	р	0	Coefficient	SE	t-ratio	df	р
Intercept	3.738	0.142	26.406	108	*0.000		3.202	0.229	13.963	105	*0.000
intercept by											
Treatment/Comparison	0.351	0.064	5.511	108	*0.000		0.355	0.061	5.847	105	*0.000
Site 1	-0.409	0.138	-2.970	108	*0.004		-0.361	0.142	-2.542	105	0.013
Site 2	-0.364	0.136	-2.683	108	*0.009		-0.366	0.132	-2.775	105	*0.007
Site 3	-0.427	0.152	-2.804	108	*0.006		-0.297	0.163	-1.824	105	0.070
Site 4	-0.042	0.172	-0.243	108	0.809		0.041	0.170	0.241	105	0.810
Site 5	-0.044	0.134	-0.326	108	0.745		0.011	0.145	0.076	105	0.940
Average hours of curriculum							0.016	0.004	4.339	105	*0.000
Total number of youth emp. activities							0.086	0.029	2.992	105	*0.004
% of total activities implemented							-0.319	0.215	-1.485	105	0.140
Hours of curriculum	0.066	0.053	1.252	2083	0.211		0.062	0.054	1.137	2083	0.256
Grade	-0.018	0.027	-0.659	2083	0.510		0.010	0.025	0.396	2083	0.691
Age (from class mean)	-0.149	0.047	-3.197	2083	0.002		-0.150	0.047	-3.220	2083	*0.002
Sex	-0.361	0.046	-7.893	2083	*0.000		-0.356	0.046	-7.688	2083	*0.000
Number computers at home	-0.015	0.042	-0.342	2083	0.732		-0.016	0.042	-0.377	2083	0.706
Computer skill	0.099	0.029	3.433	2083	*0.001		0.099	0.029	3.405	2083	*0.001
When started using Internet	0.003	0.016	0.166	2083	0.868		0.004	0.016	0.250	2083	0.802
Hours week Internet use	-0.011	0.007	-1.583	2083	0.113		-0.011	0.007	-1.584	2083	0.113
Parental Supervision	0.020	0.032	0.624	2083	0.533		0.019	0.033	0.589	2083	0.555
Comfort level with acquaintances	0.114	0.018	6.335	2083	*0.000		0.113	0.018	6.203	2083	*0.000
Previous knowledge internet safety	0.427	0.101	4.245	2083	*0.000		0.437	0.101	4.340	2083	*0.000
Online behavior	-0.036	0.037	-0.969	2083	0.333		-0.037	0.037	-0.996	2083	0.320
White	0.122	0.066	1.853	2083	0.064		0.118	0.065	1.798	2083	0.072
Black	-0.205	0.103	-1.986	2083	0.047		-0.209	0.103	-2.034	2083	0.042
Hispanic	-0.409	0.129	-3.169	2083	*0.002		-0.415	0.128	-3.249	2083	*0.002
Time	-0.055	0.024	-2.230	108	0.028		-0.067	0.086	-0.781	105	0.437
Time by											
Treatment/Comparison	0.030	0.013	2.297	108	0.024		0.030	0.013	2.293	105	0.024

		Preda	tor Identi	fication	Scale					
Site 1	0.010	0.028	0.359	108	0.720	0.009	0.027	0.326	105	0.745
Site 2	0.021	0.026	0.816	108	0.417	0.018	0.028	0.649	105	0.518
Site 3	0.029	0.031	0.943	108	0.348	0.028	0.036	0.763	105	0.447
Site 4	0.111	0.028	3.916	108	*0.000	0.110	0.031	3.505	105	*0.001
Site 5	0.030	0.025	1.225	108	0.224	0.028	0.028	0.980	105	0.330
Average hours of curriculum						0.00	0.002	0.488	105	0.626
Total number of youth emp. activities						0.002	0.010	0.200	105	0.842
% of total activities implemented						-0.030	0.048	-0.622	105	0.535
Hours of curriculum	-0.002	0.015	-0.134	2083	0.894	-0.003	0.015	-0.187	2083	0.852
Grade	-0.015	0.008	-1.946	2083	0.051	-0.014	0.008	-1.818	2083	0.069
Age (from class mean)	-0.011	0.012	-0.903	2083	0.367	-0.01	0.012	-0.900	2083	0.368
Sex	-0.032	0.011	-2.931	2083	*0.004	-0.032	0.011	-2.893	2083	*0.004
Number computers at home	0.003	0.009	0.307	2083	0.759	0.003	0.009	0.296	2083	0.767
Computer skill	0.007	0.007	1.077	2083	0.282	0.008	0.007	1.102	2083	0.271
When started using Internet	0.003	0.004	0.885	2083	0.376	0.003	0.004	0.887	2083	0.375
Hours week Internet use	0.000	0.002	0.204	2083	0.839	0.000	0.002	0.204	2083	0.838
Parental Supervision	-0.002	0.008	-0.218	2083	0.828	-0.002	0.008	-0.218	2083	0.828
Comfort level with acquaintances	-0.006	0.004	-1.453	2083	0.146	-0.006	0.004	-1.430	2083	0.153
Previous knowledge internet safety	-0.049	0.021	-2.269	2083	0.023	-0.049	0.021	-2.264	2083	0.024
Online behavior	-0.025	0.009	-2.822	2083	*0.005	-0.025	0.009	-2.817	2083	*0.005
White	0.012	0.017	0.723	2083	0.469	0.012	0.017	0.722	2083	0.470
Black	-0.014	0.026	-0.561	2083	0.575	-0.015	0.026	-0.569	2083	0.569
Hispanic	-0.050	0.030	-1.657	2083	0.097	-0.049	0.030	-1.620	2083	0.105
Time-squared	0.022	0.014	1.504	2083	0.132	0.085	0.028	3.000	2083	*0.003
Time-squared by										
Treatment/Comparison	-0.050	0.007	-6.768	2083	*0.000	-0.05	0.007	-7.094	2083	*0.000
Site 1	0.003	0.014	0.210	2083	0.834	0.003	0.013	0.195	2083	0.846
Site 2	0.000	0.015	-0.014	2083	0.989	-0.006	0.013	-0.422	2083	0.673
Site 3	0.003	0.019	0.172	2083	0.864	-0.016	0.018	-0.860	2083	0.390
Site 4	-0.014	0.019	-0.703	2083	0.482	-0.02	0.019	-1.107	2083	0.269
Site 5	0.000	0.014	0.012	2083	0.991	-0.005	0.013	-0.385	2083	0.700
Average hours of curriculum						-0.00	0.000	-1.210	2083	0.227
Total number of youth emp. activities						-0.004	0.003	-1.265	2083	0.206
% of total activities implemented						-0.042	0.024	-1.683	2083	0.092

		Preda	tor Identi	fication	Scale					
Hours of curriculum	-0.001	0.008	-0.174	2083	0.862	-0.002	0.008	-0.253	2083	0.800
Grade	0.010	0.003	3.019	2083	*0.003	0.008	0.003	2.281	2083	0.023
Age (from class mean)	-0.007	0.007	-0.874	2083	0.382	-0.007	0.007	-0.878	2083	0.380
Sex	0.014	0.007	1.915	2083	0.055	0.014	0.007	1.948	2083	0.051
Number computers at home	0.004	0.006	0.592	2083	0.554	0.004	0.006	0.616	2083	0.537
Computer skill	0.006	0.004	1.722	2083	0.085	0.006	0.004	1.718	2083	0.085
When started using Internet	-0.003	0.002	-1.361	2083	0.174	-0.003	0.002	-1.564	2083	0.118
Hours week Internet use	0.001	0.001	0.761	2083	0.447	0.001	0.001	0.779	2083	0.436
Parental Supervision	0.009	0.005	1.775	2083	0.076	0.009	0.005	1.745	2083	0.081
Comfort level with acquaintances	-0.001	0.003	-0.386	2083	0.699	-0.001	0.003	-0.396	2083	0.692
Previous knowledge internet safety	0.017	0.015	1.148	2083	0.251	0.016	0.014	1.078	2083	0.282
Online behavior	-0.002	0.006	-0.323	2083	0.747	-0.002	0.006	-0.385	2083	0.700
White	0.011	0.009	1.255	2083	0.210	0.011	0.009	1.242	2083	0.215
Black	0.023	0.015	1.534	2083	0.125	0.023	0.015	1.559	2083	0.119
Hispanic	0.030	0.016	1.840	2083	0.065	0.032	0.016	1.978	2083	0.048
Random Effects	Variance	Chi	-square	df	р	Variance	Chi	-square	df	р
Level 1 and Level 2			•					-		-
Intercept	0.705	6	840.241	1905	*0.000	0.705	6	985.529	1905	*0.000
Time	0.020	3	026.370	1905	*0.000	0.020	3	028.319	1905	*0.000
Time-squared	0.003	2	369.142	2019	*0.000	0.003	2	361.578	2019	*0.000
level-1	0.656					0.656				
Level 3										
Intercept	0.022		187.110	108	*0.000	0.013		160.497	105	*0.001
Time	0.001		151.484	108	*0.004	0.001		149.662	105	*0.003
Model A Deviance = 33185.72; # parame	 eters = 76					Model B Dev 85	iance = 3	3161.53; :	# parame	eters =
*p < .01										

## SHARING PERSONAL INFORMATION

	S	Sharing F	Personal I	nformat	ion Scale	;					
	Model A (Wi Measures)	thout Int	ensity				Model B (Wi	th Intens	sity Measu	ures)	
Fixed Effect	Coefficient	SE	t-ratio	df	р		Coefficient	SE	t-ratio	df	р
Intercept	1.539	0.044	34.906	108	*0.000		1.776	0.091	19.576	105	*0.000
intercept by											
Treatment/Comparison	-0.079	0.022	-3.501	108	*0.001		-0.080	0.022	-3.634	105	0.001
Site 1	-0.024	0.050	-0.486	108	0.628		-0.009	0.052	-0.167	105	0.868
Site 2	-0.044	0.047	-0.925	108	0.358		-0.045	0.048	-0.954	105	0.342
Site 3	-0.047	0.051	-0.910	108	0.365		-0.094	0.050	-1.880	105	0.062
Site 4	-0.033	0.054	-0.616	108	0.539		-0.034	0.057	-0.608	105	0.544
Site 5	-0.024	0.045	-0.540	108	0.590		-0.017	0.047	-0.358	105	0.721
Average hours of curriculum							-0.004	0.001	-2.874	105	0.005
Total number of youth emp. activities							-0.010	0.012	-0.828	105	0.410
% of total activities implemented							-0.063	0.077	-0.819	105	0.415
Hours of curriculum	0.016	0.021	0.742	2082	0.458		0.017	0.021	0.809	2082	0.419
Grade	0.047	0.012	4.066	2082	*0.000		0.039	0.012	3.358	2082	0.001
Age (from class mean)	0.004	0.019	0.226	2082	0.821		0.005	0.019	0.254	2082	0.799
Sex	-0.030	0.022	-1.321	2082	0.187		-0.031	0.022	-1.400	2082	0.162
Number computers at home	0.007	0.015	0.469	2082	0.639		0.008	0.015	0.543	2082	0.587
Computer skill	0.010	0.012	0.841	2082	0.401		0.010	0.012	0.797	2082	0.426
When started using Internet	-0.002	0.007	-0.353	2082	0.724		-0.004	0.007	-0.520	2082	0.603
Hours week Internet use	0.006	0.003	2.235	2082	0.025		0.006	0.003	2.218	2082	0.027
Parental Supervision	-0.046	0.013	-3.494	2082	*0.001		-0.046	0.013	-3.472	2082	0.001
Comfort level with acquaintances	-0.065	0.009	-7.590	2082	*0.000		-0.064	0.009	-7.496	2082	*0.000
Previous knowledge internet safety	-0.107	0.037	-2.883	2082	*0.004		-0.111	0.037	-3.001	2082	0.003
Online behavior	0.145	0.017	8.490	2082	*0.000		0.145	0.017	8.456	2082	*0.000
White	0.052	0.027	1.908	2082	0.056		0.053	0.027	1.956	2082	0.050
Black	-0.060	0.036	-1.669	2082	0.095		-0.056	0.036	-1.543	2082	0.123
Hispanic	-0.026	0.045	-0.563	2082	0.573		-0.023	0.045	-0.509	2082	0.610
Time	-0.007	0.004	-1.938	2082	0.052		0.043	0.021	2.052	2082	0.040
Time by											
Treatment/Comparison	-0.008	0.005	-1.675	2082	0.094		-0.008	0.005	-1.870	2082	0.061

	S	Sharing F	Personal	Informat	ion Scale	)					
Site 1	0.005	0.006	0.833	2082	0.405		0.006	0.006	0.936	2082	0.350
Site 2	0.009	0.006	1.443	2082	0.149		0.004	0.007	0.562	2082	0.574
Site 3	-0.002	0.006	-0.340	2082	0.734		-0.017	0.010	-1.672	2082	0.094
Site 4	0.009	0.010	0.861	2082	0.389		0.004	0.011	0.371	2082	0.710
Site 5	0.003	0.006	0.552	2082	0.581		0.000	0.007	0.009	2082	0.993
Average hours of curriculum							0.000	0.000	-0.557	2082	0.577
Total number of youth emp. activities							-0.002	0.002	-0.799	2082	0.425
% of total activities implemented							-0.045	0.017	-2.739	2082	0.007
Hours of curriculum	0.003	0.005	0.594	2082	0.552		0.003	0.005	0.466	2082	0.641
Grade	0.007	0.003	2.743	2082	0.007		0.006	0.003	2.310	2082	0.021
Age (from class mean)	0.003	0.005	0.545	2082	0.585		0.003	0.005	0.535	2082	0.592
Sex	-0.007	0.005	-1.227	2082	0.220		-0.006	0.005	-1.170	2082	0.242
Number computers at home	0.005	0.004	1.040	2082	0.299		0.005	0.004	1.062	2082	0.289
Computer skill	-0.003	0.003	-0.860	2082	0.390		-0.003	0.003	-0.875	2082	0.382
When started using Internet	-0.002	0.002	-1.251	2082	0.211		-0.003	0.002	-1.477	2082	0.140
Hours week Internet use	0.003	0.001	3.747	2082	*0.000		0.003	0.001	3.832	2082	*0.000
Parental Supervision	0.002	0.004	0.515	2082	0.606		0.002	0.004	0.446	2082	0.655
Comfort level with acquaintances	0.008	0.002	3.914	2082	*0.000		0.008	0.002	3.898	2082	*0.000
Previous knowledge internet safety	0.000	0.011	0.012	2082	0.990		-0.001	0.011	-0.071	2082	0.944
Online behavior	-0.020	0.005	-4.432	2082	*0.000		-0.021	0.005	-4.568	2082	*0.000
White	-0.004	0.008	-0.577	2082	0.564		-0.005	0.008	-0.601	2082	0.548
Black	-0.029	0.011	-2.683	2082	0.008		-0.029	0.011	-2.668	2082	0.008
Hispanic	-0.011	0.014	-0.782	2082	0.434		-0.009	0.014	-0.637	2082	0.524
Time-squared	0.001	0.006	0.127	11751	0.899		-0.026	0.016	-1.639	11742	0.101
Time-squared by											
Treatment/Comparison	0.008	0.003	2.541	11751	0.011		0.008	0.003	2.593	11742	0.010
Site 1	-0.001	0.007	-0.137	11751	0.891		-0.006	0.006	-0.904	11742	0.366
Site 2	-0.005	0.007	-0.687	11751	0.492		-0.005	0.007	-0.799	11742	0.424
Site 3	0.002	0.007	0.291	11751	0.771		0.005	0.007	0.795	11742	0.427
Site 4	0.009	0.009	1.011	11751	0.312		0.006	0.009	0.747	11742	0.455
Site 5	0.000	0.007	0.067	11751	0.947		-0.003	0.007	-0.517	11742	0.605
Average hours of curriculum							0.000	0.000	1.366	11742	0.172
Total number of youth emp. activities							-0.001	0.002	-0.423	11742	0.672
% of total activities implemented							0.015	0.012	1.271	11742	0.204

	S	haring F	Personal	nformati	ion Scale					
Hours of curriculum	0.000	0.003	-0.092	11751	0.927	-0.001	0.003	-0.156	11742	0.876
Grade	-0.003	0.002	-2.261	11751	0.024	-0.003	0.002	-1.786	11742	0.074
Age (from class mean)	0.000	0.003	-0.124	11751	0.902	0.000	0.003	-0.140	11742	0.889
Sex	0.003	0.003	0.811	11751	0.417	0.003	0.003	0.852	11742	0.395
Number computers at home	0.000	0.002	0.017	11751	0.986	0.000	0.002	-0.043	11742	0.966
Computer skill	0.000	0.002	-0.060	11751	0.953	0.000	0.002	0.005	11742	0.996
When started using Internet	0.000	0.001	0.155	11751	0.877	0.000	0.001	0.301	11742	0.763
Hours week Internet use	0.000	0.000	-0.449	11751	0.653	0.000	0.000	-0.407	11742	0.684
Parental Supervision	0.001	0.002	0.452	11751	0.651	0.001	0.002	0.435	11742	0.663
Comfort level with acquaintances	-0.001	0.001	-1.322	11751	0.186	-0.001	0.001	-1.351	11742	0.177
Previous knowledge internet safety	-0.001	0.005	-0.286	11751	0.775	-0.001	0.005	-0.206	11742	0.837
Online behavior	-0.001	0.003	-0.410	11751	0.681	-0.001	0.003	-0.397	11742	0.691
White	-0.004	0.004	-0.828	11751	0.408	-0.004	0.004	-0.857	11742	0.392
Black	-0.001	0.007	-0.212	11751	0.832	-0.002	0.007	-0.318	11742	0.750
Hispanic	-0.005	0.008	-0.686	11751	0.493	-0.005	0.008	-0.690	11742	0.490
Random Effects	Variance	Chi	-square	df	р	Variance	Chi	-square	df	р
Level 1 and Level 2										
Intercept	0.088	8	332.174	1939	*0.000	0.088	8	400.907	1939	*0.000
Time	0.003	2	682.707	2053	*0.000	0.003	2	674.039	2053	*0.000
level-1	0.159					0.159				
Level 3										
Intercept	0.001		132.154	108	0.057	 0.001		126.756	105	0.073
						Model B Devi	ance = 1	5119.04;	# parame	eters =
Model A Deviance = 15136.79; # parame	eters = 71					80				
*p < .01										

# **COMPUTER VIRUSES**

		Cor	nputer Vi	ruses So	ale					
	Model A (Wi Measures)	thout Int	ensity			Model B (Wi	th Intens	ity Measu	ures)	
Fixed Effect	Coefficient	SE	t-ratio	df	р	Coefficient	SE	t-ratio	df	р
Intercept	1.923	0.041	47.048	108	*0.000	2.013	0.134	15.058	105	*0.000
intercept by										
Treatment/Comparison	-0.101	0.029	-3.450	108	*0.001	-0.100	0.029	-3.410	105	*0.001
Site 1	-0.195	0.051	-3.800	108	*0.000	-0.160	0.059	-2.722	105	*0.008
Site 2	-0.141	0.047	-2.988	108	*0.004	-0.131	0.053	-2.441	105	0.017
Site 3	-0.164	0.046	-3.580	108	*0.001	-0.159	0.065	-2.462	105	0.016
Site 4	-0.113	0.059	-1.919	108	0.057	-0.081	0.071	-1.140	105	0.257
Site 5	-0.079	0.043	-1.826	108	0.070	-0.044	0.058	-0.761	105	0.448
Average hours of curriculum						-0.002	0.002	-0.744	105	0.458
Total number of youth emp. activities						0.014	0.019	0.735	105	0.464
% of total activities implemented						-0.065	0.119	-0.545	105	0.586
Hours of curriculum	0.032	0.023	1.386	2082	0.166	0.033	0.023	1.456	2082	0.145
Grade	0.060	0.017	3.645	2082	*0.000	0.059	0.016	3.573	2082	*0.001
Age (from class mean)	-0.057	0.025	-2.272	2082	0.023	-0.057	0.025	-2.262	2082	0.024
Sex	-0.055	0.027	-2.040	2082	0.041	-0.056	0.027	-2.063	2082	0.039
Number computers at home	0.043	0.020	2.211	2082	0.027	0.044	0.020	2.257	2082	0.024
Computer skill	0.037	0.014	2.646	2082	*0.009	0.036	0.014	2.551	2082	0.011
When started using Internet	0.003	0.008	0.317	2082	0.751	0.002	0.008	0.251	2082	0.802
Hours week Internet use	0.007	0.003	2.126	2082	0.033	0.006	0.003	2.083	2082	0.037
Parental Supervision	-0.059	0.016	-3.748	2082	*0.000	-0.058	0.016	-3.701	2082	*0.000
Comfort level with acquaintances	-0.040	0.010	-4.039	2082	*0.000	-0.039	0.010	-4.012	2082	*0.000
Previous knowledge internet safety	-0.064	0.047	-1.352	2082	0.177	-0.065	0.047	-1.380	2082	0.168
Online behavior	0.105	0.022	4.765	2082	*0.000	0.105	0.022	4.760	2082	*0.000
White	0.102	0.036	2.789	2082	*0.006	0.103	0.037	2.790	2082	*0.006
Black	-0.097	0.048	-2.022	2082	0.043	-0.092	0.048	-1.920	2082	0.055
Hispanic	-0.137	0.062	-2.222	2082	0.026	-0.139	0.062	-2.246	2082	0.025
Time	-0.022	0.006	-3.652	2082	*0.000	0.044	0.020	2.241	2082	0.025
Time by										
Treatment/Comparison	-0.019	0.006	-3.184	2082	*0.002	-0.020	0.006	-3.355	2082	*0.001

		Con	nputer Vi	ruses So	ale					
Site 1	-0.016	0.009	-1.813	2082	0.070	-0.007	0.009	-0.853	2082	0.394
Site 2	0.008	0.009	0.908	2082	0.364	0.006	0.010	0.582	2082	0.560
Site 3	-0.019	0.008	-2.332	2082	0.020	-0.032	0.011	-3.052	2082	*0.003
Site 4	0.010	0.011	0.911	2082	0.363	0.012	0.012	1.050	2082	0.294
Site 5	-0.015	0.007	-2.224	2082	0.026	-0.010	0.009	-1.190	2082	0.234
Average hours of curriculum						-0.001	0.000	-1.699	2082	0.089
Total number of youth emp. activities						0.001	0.003	0.226	2082	0.822
% of total activities implemented						-0.052	0.022	-2.380	2082	0.018
Hours of curriculum	0.009	0.006	1.498	2082	0.134	0.008	0.006	1.463	2082	0.144
Grade	-0.003	0.003	-0.819	2082	0.413	-0.004	0.003	-1.286	2082	0.199
Age (from class mean)	-0.006	0.006	-1.061	2082	0.289	-0.006	0.006	-1.062	2082	0.289
Sex	-0.009	0.005	-1.747	2082	0.080	-0.009	0.005	-1.714	2082	0.086
Number computers at home	0.003	0.005	0.536	2082	0.591	0.003	0.005	0.586	2082	0.558
Computer skill	-0.001	0.003	-0.413	2082	0.679	-0.002	0.003	-0.469	2082	0.639
When started using Internet	0.001	0.002	0.254	2082	0.800	0.000	0.002	0.035	2082	0.972
Hours week Internet use	0.002	0.001	2.199	2082	0.028	0.002	0.001	2.214	2082	0.027
Parental Supervision	-0.001	0.004	-0.238	2082	0.812	-0.001	0.004	-0.264	2082	0.792
Comfort level with acquaintances	0.002	0.002	0.901	2082	0.368	0.002	0.002	0.893	2082	0.372
Previous knowledge internet safety	-0.012	0.012	-0.970	2082	0.333	-0.013	0.012	-1.055	2082	0.292
Online behavior	-0.018	0.005	-3.985	2082	*0.000	-0.019	0.005	-4.076	2082	*0.000
White	0.001	0.009	0.059	2082	0.954	0.001	0.009	0.062	2082	0.951
Black	-0.011	0.013	-0.820	2082	0.413	-0.009	0.013	-0.719	2082	0.472
Hispanic	-0.008	0.013	-0.630	2082	0.529	-0.007	0.013	-0.531	2082	0.595
Time-squared	0.011	0.007	1.527	2082	0.127	0.005	0.017	0.309	2082	0.757
Time-squared by										
Treatment/Comparison	0.009	0.004	2.385	2082	0.017	0.009	0.004	2.331	2082	0.020
Site 1	0.008	0.008	0.997	2082	0.319	0.003	0.009	0.377	2082	0.706
Site 2	-0.003	0.008	-0.409	2082	0.682	-0.004	0.008	-0.525	2082	0.599
Site 3	-0.004	0.008	-0.502	2082	0.615	-0.006	0.009	-0.664	2082	0.506
Site 4	0.007	0.011	0.594	2082	0.552	0.002	0.011	0.159	2082	0.874
Site 5	-0.005	0.008	-0.659	2082	0.510	-0.010	0.008	-1.200	2082	0.231
Average hours of curriculum						0.000	0.000	0.074	2082	0.941
Total number of youth emp. activities						-0.003	0.002	-1.321	2082	0.187
% of total activities implemented						0.013	0.016	0.826	2082	0.409

		Cor	nputer Vi	ruses So	ale					
Hours of curriculum	0.001	0.004	0.364	2082	0.716	0.001	0.004	0.328	2082	0.743
Grade	0.000	0.002	0.000	2082	1.000	0.000	0.002	-0.065	2082	0.949
Age (from class mean)	0.002	0.004	0.586	2082	0.557	0.002	0.004	0.584	2082	0.559
Sex	-0.005	0.004	-1.389	2082	0.165	-0.005	0.004	-1.405	2082	0.160
Number computers at home	0.002	0.003	0.775	2082	0.439	0.002	0.003	0.749	2082	0.454
Computer skill	0.002	0.002	0.892	2082	0.373	0.002	0.002	0.934	2082	0.351
When started using Internet	-0.001	0.001	-1.088	2082	0.277	-0.001	0.001	-1.025	2082	0.306
Hours week Internet use	0.000	0.000	-0.528	2082	0.597	0.000	0.000	-0.501	2082	0.616
Parental Supervision	0.003	0.003	1.206	2082	0.228	0.003	0.003	1.211	2082	0.226
Comfort level with acquaintances	-0.002	0.001	-1.451	2082	0.147	-0.002	0.001	-1.428	2082	0.153
Previous knowledge internet safety	-0.001	0.007	-0.187	2082	0.852	-0.001	0.007	-0.200	2082	0.842
Online behavior	0.004	0.003	1.464	2082	0.143	0.004	0.003	1.475	2082	0.140
White	0.000	0.006	-0.060	2082	0.953	0.000	0.006	-0.070	2082	0.945
Black	-0.002	0.008	-0.278	2082	0.781	-0.003	0.008	-0.350	2082	0.726
Hispanic	0.006	0.009	0.646	2082	0.518	0.006	0.009	0.674	2082	0.500
Random Effects	Variance	Chi	-square	df	р	Variance	Chi	-square	df	р
Level 1 and Level 2			-					-		-
Intercept	0.197	7	297.891	1907	*0.000	0.197	7	305.390	1907	*0.000
Time	0.005	3	038.247	2021	*0.000	0.005	3	025.475	2021	*0.000
Time-squared	0.001	2	312.431	2021	*0.000	0.001	2	309.420	2021	*0.000
level-1	0.180					0.180				
Level 3										
Intercept	0.002		138.359	108	0.026	0.001		136.975	105	0.020
Model A Deviance = 17951.64; # param	eters = 74					Model B Devi 83	ance = 1	7939.88;	# parame	eters =
*p < .01										

### COMMUNICATION

		Co	mmunica	ation Sca	ale					
	Model A (Wi Measures)					Model B (Wi	th Intens	ity Meas	ures)	
Fixed Effect	Coefficient	SE	t-ratio	df	р	Coefficient	SE	t-ratio	df	р
Intercept	1.479	0.044	33.407	108	*0.000	1.402	0.128	10.963	105	*0.000
intercept by										
Treatment/Comparison	0.057	0.025	2.248	108	0.027	0.057	0.025	2.263	105	0.026
Site 1	-0.050	0.046	-1.090	108	0.279	-0.045	0.052	-0.865	105	0.390
Site 2	-0.050	0.052	-0.968	108	0.335	-0.059	0.050	-1.174	105	0.244
Site 3	-0.035	0.051	-0.686	108	0.494	-0.024	0.063	-0.376	105	0.707
Site 4	0.029	0.067	0.433	108	0.665	0.037	0.072	0.513	105	0.608
Site 5	0.066	0.045	1.473	108	0.143	0.070	0.053	1.326	105	0.188
Average hours of curriculum						0.003	0.002	1.562	105	0.121
Total number of youth emp. activities						0.017	0.014	1.175	105	0.243
% of total activities implemented						-0.106	0.101	-1.044	105	0.299
Hours of curriculum	0.000	0.028	-0.005	2081	0.996	-0.003	0.029	-0.092	2081	0.927
Grade	-0.025	0.013	-1.889	2081	0.059	-0.020	0.014	-1.453	2081	0.146
Age (from class mean)	0.014	0.030	0.469	2081	0.638	0.014	0.030	0.459	2081	0.646
Sex	-0.127	0.022	-5.639	2081	*0.000	-0.125	0.022	-5.571	2081	*0.000
Number computers at home	-0.061	0.022	-2.799	2081	*0.006	-0.062	0.022	-2.831	2081	*0.005
Computer skill	0.023	0.017	1.362	2081	0.173	0.023	0.017	1.349	2081	0.178
When started using Internet	-0.026	0.009	-2.935	2081	*0.004	-0.026	0.009	-2.924	2081	*0.004
Hours week Internet use	0.000	0.003	-0.133	2081	0.894	0.000	0.003	-0.101	2081	0.920
Parental Supervision	0.182	0.020	9.046	2081	*0.000	0.181	0.020	8.992	2081	*0.000
Comfort level with acquaintances	-0.015	0.010	-1.542	2081	0.123	-0.016	0.010	-1.619	2081	0.105
Previous knowledge internet safety	0.259	0.044	5.901	2081	*0.000	0.262	0.044	5.989	2081	*0.000
Online behavior	0.106	0.022	4.757	2081	*0.000	0.105	0.023	4.649	2081	*0.000
White	-0.052	0.043	-1.213	2081	0.226	-0.053	0.043	-1.242	2081	0.215
Black	-0.079	0.053	-1.487	2081	0.137	-0.079	0.054	-1.468	2081	0.142
Hispanic	0.017	0.062	0.270	2081	0.787	0.018	0.062	0.283	2081	0.777
Time	-0.061	0.009	-6.659	2081	*0.000	-0.033	0.028	-1.199	2081	0.231
Time by										

		Co	mmunica	tion Sca	ale					
Treatment/Comparison	0.011	0.007	1.712	2081	0.087	0.011	0.007	1.725	2081	0.084
Site 1	0.018	0.011	1.670	2081	0.095	0.027	0.012	2.177	2081	0.029
Site 2	0.005	0.012	0.440	2081	0.659	0.004	0.013	0.296	2081	0.767
Site 3	0.009	0.014	0.626	2081	0.531	0.006	0.013	0.423	2081	0.672
Site 4	0.004	0.017	0.265	2081	0.791	0.010	0.017	0.592	2081	0.553
Site 5	0.018	0.010	1.807	2081	0.070	0.025	0.011	2.184	2081	0.029
Average hours of curriculum						0.000	0.000	0.132	2081	0.895
Total number of youth emp. activities						0.005	0.003	1.333	2081	0.183
% of total activities implemented						-0.048	0.028	-1.737	2081	0.082
Hours of curriculum	0.008	0.006	1.382	2081	0.167	0.008	0.006	1.323	2081	0.186
Grade	0.008	0.004	2.162	2081	0.031	0.008	0.004	2.014	2081	0.044
Age (from class mean)	0.004	0.006	0.627	2081	0.530	0.004	0.006	0.620	2081	0.535
Sex	0.010	0.006	1.654	2081	0.098	0.011	0.006	1.702	2081	0.089
Number computers at home	-0.007	0.006	-1.246	2081	0.213	-0.007	0.006	-1.231	2081	0.219
Computer skill	-0.008	0.004	-1.852	2081	0.064	-0.008	0.004	-1.923	2081	0.054
When started using Internet	0.000	0.002	0.102	2081	0.919	0.000	0.002	-0.035	2081	0.973
Hours week Internet use	0.002	0.001	1.606	2081	0.108	0.002	0.001	1.607	2081	0.108
Parental Supervision	-0.020	0.005	-4.003	2081	*0.000	-0.020	0.005	-4.064	2081	*0.000
Comfort level with acquaintances	0.000	0.002	-0.199	2081	0.842	-0.001	0.002	-0.237	2081	0.813
Previous knowledge internet safety	-0.043	0.013	-3.312	2081	*0.001	-0.043	0.013	-3.349	2081	*0.001
Online behavior	-0.020	0.006	-3.475	2081	*0.001	-0.020	0.006	-3.531	2081	*0.001
White	-0.002	0.010	-0.205	2081	0.838	-0.002	0.010	-0.225	2081	0.822
Black	-0.018	0.016	-1.119	2081	0.264	-0.017	0.016	-1.042	2081	0.298
Hispanic	-0.025	0.015	-1.631	2081	0.103	-0.025	0.016	-1.576	2081	0.115
Time-squared	0.003	0.004	0.696	2081	0.486	0.047	0.016	2.911	2081	*0.004
Time-squared by										
Treatment/Comparison	-0.015	0.004	-3.636	2081	*0.001	-0.015	0.004	-3.826	2081	*0.000
Site 1	0.005	0.005	0.910	2081	0.363	0.004	0.006	0.650	2081	0.516
Site 2	0.013	0.006	2.068	2081	0.038	0.012	0.005	2.289	2081	0.022
Site 3	0.008	0.006	1.355	2081	0.176	-0.003	0.006	-0.462	2081	0.644
Site 4	0.005	0.009	0.522	2081	0.601	0.000	0.010	0.028	2081	0.978
Site 5	0.006	0.005	1.224	2081	0.222	0.003	0.005	0.606	2081	0.544
Average hours of curriculum						-0.001	0.000	-3.340	2081	*0.001
Total number of youth emp. activities						-0.005	0.002	-2.611	2081	*0.009

		Co	mmunica	ation Sca	ale					
% of total activities implemented						0.007	0.016	0.477	2081	0.633
Hours of curriculum	0.000	0.004	-0.072	2081	0.943	0.000	0.004	0.021	2081	0.984
Grade	0.001	0.002	0.436	2081	0.662	-0.001	0.002	-0.568	2081	0.569
Age (from class mean)	0.000	0.004	-0.097	2081	0.923	0.000	0.004	-0.064	2081	0.949
Sex	0.007	0.004	1.846	2081	0.065	0.007	0.004	1.738	2081	0.082
Number computers at home	0.000	0.003	-0.045	2081	0.965	0.000	0.003	-0.010	2081	0.992
Computer skill	0.003	0.003	0.932	2081	0.352	0.003	0.003	0.940	2081	0.348
When started using Internet	0.002	0.002	1.305	2081	0.192	0.002	0.002	1.215	2081	0.225
Hours week Internet use	0.000	0.001	0.594	2081	0.552	0.000	0.001	0.580	2081	0.561
Parental Supervision	0.001	0.004	0.150	2081	0.881	0.001	0.004	0.213	2081	0.832
Comfort level with acquaintances	0.000	0.001	-0.123	2081	0.902	0.000	0.001	-0.014	2081	0.989
Previous knowledge internet safety	0.007	0.007	1.033	2081	0.302	0.006	0.007	0.879	2081	0.380
Online behavior	0.006	0.004	1.779	2081	0.075	0.007	0.004	1.808	2081	0.070
White	0.000	0.006	0.017	2081	0.987	0.000	0.006	0.058	2081	0.954
Black	0.001	0.008	0.161	2081	0.872	0.002	0.008	0.192	2081	0.848
Hispanic	0.000	0.009	0.024	2081	0.981	0.001	0.009	0.097	2081	0.923
Random Effects	Variance	Chi	-square	df	р	Variance	Chi	-square	df	р
Level 1 and Level 2										
Intercept	0.202	6	072.096	1904	*0.000	0.201	6	065.539	1904	*0.000
Time	0.006	2	856.017	2018	*0.000	0.006	2	849.480	2018	*0.000
Time-squared	0.001	2	382.587	2018	*0.000	0.001	2	371.983	2018	*0.000
level-1	0.237					0.237				
Level 3										
Intercept	0.001		125.531	108	0.119	0.001		124.528	105	0.094
Model A Deviance = 20715.47; # param	eters = 74					Model B Devi 83	ance = 2	eters =		
*p < .01										

## EMAIL PROTOCOL

		E-I	mail Prote	ocol Sca	le					
	Model A (Without Intensity Measures)			Model B (With Intensity Measure			ures)			
Fixed Effect	Coefficient	SE	t-ratio	df	р	Coefficient	SE	t-ratio	df	р
Intercept	0.808	0.010	78.997	108	*0.000	0.745	0.045	16.678	105	*0.000
intercept by										
Treatment/Comparison	0.013	0.011	1.170	108	0.245	0.013	0.011	1.178	105	0.242
Site 1	0.012	0.014	0.852	108	0.397	0.006	0.015	0.421	105	0.675
Site 2	-0.006	0.014	-0.454	108	0.650	-0.005	0.015	-0.365	105	0.715
Site 3	0.024	0.018	1.345	108	0.182	0.037	0.025	1.463	105	0.146
Site 4	-0.049	0.027	-1.775	108	0.078	-0.049	0.028	-1.767	105	0.080
Site 5	-0.009	0.013	-0.642	108	0.522	-0.011	0.017	-0.663	105	0.509
Average hours of curriculum						0.001	0.001	1.229	105	0.222
Total number of youth emp. activities						0.002	0.005	0.386	105	0.700
% of total activities implemented						0.026	0.044	0.584	105	0.560
Hours of curriculum	-0.009	0.013	-0.675	1757	0.500	-0.009	0.013	-0.706	1757	0.480
Grade	-0.008	0.005	-1.554	1757	0.120	-0.006	0.005	-1.157	1757	0.248
Age (from class mean)	0.001	0.011	0.085	1757	0.933	0.001	0.011	0.080	1757	0.937
Sex	0.046	0.011	4.098	1757	*0.000	0.046	0.011	4.116	1757	*0.000
Number computers at home	-0.008	0.009	-0.849	1757	0.396	-0.008	0.009	-0.877	1757	0.381
Computer skill	-0.003	0.007	-0.461	1757	0.644	-0.003	0.007	-0.466	1757	0.641
When started using Internet	0.000	0.004	-0.075	1757	0.941	0.000	0.004	0.002	1757	0.999
Hours week Internet use	-0.002	0.001	-1.221	1757	0.223	-0.002	0.001	-1.187	1757	0.236
Parental Supervision	0.018	0.007	2.513	1757	0.012	0.018	0.007	2.510	1757	0.012
Comfort level with acquaintances	0.028	0.005	5.950	1757	*0.000	0.027	0.005	5.868	1757	*0.000
Previous knowledge internet safety	0.020	0.021	0.930	1757	0.353	0.021	0.021	0.989	1757	0.323
Online behavior	-0.030	0.009	-3.451	1757	*0.001	-0.030	0.009	-3.360	1757	*0.001
White	-0.008	0.015	-0.539	1757	0.589	-0.008	0.015	-0.545	1757	0.586
Black	0.015	0.022	0.680	1757	0.496	0.014	0.022	0.631	1757	0.528
Hispanic	0.008	0.030	0.280	1757	0.780	0.008	0.030	0.253	1757	0.801
Time	-0.006	0.005	-1.228	1757	0.220	-0.011	0.013	-0.897	1757	0.370
Time by										

		E-I	mail Prote	ocol Sca	le					
Treatment/Comparison	0.003	0.003	0.970	1757	0.333	0.002	0.003	0.933	1757	0.351
Site 1	-0.002	0.006	-0.265	1757	0.791	-0.004	0.005	-0.862	1757	0.389
Site 2	-0.003	0.006	-0.588	1757	0.557	-0.004	0.005	-0.834	1757	0.405
Site 3	-0.003	0.007	-0.385	1757	0.700	-0.004	0.008	-0.436	1757	0.662
Site 4	-0.003	0.008	-0.360	1757	0.718	-0.005	0.007	-0.732	1757	0.464
Site 5	0.001	0.006	0.126	1757	0.900	-0.002	0.005	-0.417	1757	0.676
Average hours of curriculum						0.000	0.000	0.380	1757	0.704
Total number of youth emp. activities						-0.001	0.002	-0.939	1757	0.348
% of total activities implemented						0.006	0.012	0.472	1757	0.637
Hours of curriculum	-0.006	0.003	-1.959	1757	0.050	-0.006	0.003	-1.949	1757	0.051
Grade	-0.002	0.001	-1.188	1757	0.235	-0.002	0.002	-1.138	1757	0.256
Age (from class mean)	0.001	0.003	0.464	1757	0.642	0.001	0.003	0.471	1757	0.637
Sex	0.001	0.003	0.223	1757	0.824	0.001	0.003	0.228	1757	0.820
Number computers at home	0.002	0.002	0.793	1757	0.428	0.002	0.002	0.790	1757	0.430
Computer skill	-0.003	0.002	-1.442	1757	0.149	-0.002	0.002	-1.400	1757	0.162
When started using Internet	0.000	0.001	-0.280	1757	0.779	0.000	0.001	-0.270	1757	0.787
Hours week Internet use	0.000	0.000	-1.369	1757	0.171	0.000	0.000	-1.330	1757	0.184
Parental Supervision	0.000	0.002	-0.126	1757	0.900	0.000	0.002	-0.117	1757	0.908
Comfort level with acquaintances	-0.001	0.001	-0.829	1757	0.408	-0.001	0.001	-0.843	1757	0.400
Previous knowledge internet safety	0.000	0.007	0.070	1757	0.945	0.001	0.007	0.079	1757	0.937
Online behavior	0.006	0.003	2.542	1757	0.011	0.006	0.003	2.525	1757	0.012
White	0.001	0.004	0.306	1757	0.760	0.001	0.004	0.269	1757	0.788
Black	-0.001	0.005	-0.122	1757	0.903	-0.001	0.005	-0.230	1757	0.818
Hispanic	0.007	0.008	0.877	1757	0.381	0.007	0.008	0.860	1757	0.390
Time-squared	-0.002	0.003	-0.914	8038	0.361	-0.001	0.007	-0.082	8029	0.935
Time-squared by										
Treatment/Comparison	-0.001	0.002	-0.452	8038	0.651	-0.001	0.002	-0.455	8029	0.648
Site 1	0.001	0.003	0.328	8038	0.742	0.001	0.003	0.384	8029	0.700
Site 2	0.002	0.003	0.720	8038	0.471	0.002	0.003	0.711	8029	0.477
Site 3	-0.002	0.003	-0.673	8038	0.501	-0.003	0.004	-0.684	8029	0.494
Site 4	0.004	0.005	0.795	8038	0.426	0.004	0.005	0.781	8029	0.435
Site 5	0.003	0.003	0.990	8038	0.323	0.003	0.003	0.952	8029	0.342
Average hours of curriculum						0.000	0.000	-0.157	8029	0.876
Total number of youth emp. activities						0.000	0.001	0.010	8029	0.992

		E-I	mail Prote	ocol Sca	le					
% of total activities implemented						-0.001	0.006	-0.207	8029	0.836
Hours of curriculum	-0.001	0.002	-0.594	8038	0.552	-0.001	0.002	-0.609	8029	0.543
Grade	0.001	0.001	1.641	8038	0.101	0.001	0.001	1.536	8029	0.124
Age (from class mean)	0.000	0.002	-0.037	8038	0.971	0.000	0.002	-0.039	8029	0.970
Sex	-0.001	0.002	-0.834	8038	0.405	-0.001	0.002	-0.821	8029	0.412
Number computers at home	0.001	0.001	0.547	8038	0.584	0.001	0.001	0.545	8029	0.585
Computer skill	0.001	0.001	0.708	8038	0.479	0.001	0.001	0.693	8029	0.488
When started using Internet	-0.001	0.001	-1.818	8038	0.069	-0.001	0.001	-1.811	8029	0.070
Hours week Internet use	0.000	0.000	1.169	8038	0.243	0.000	0.000	1.167	8029	0.244
Parental Supervision	-0.001	0.001	-0.479	8038	0.632	-0.001	0.001	-0.496	8029	0.619
Comfort level with acquaintances	0.000	0.001	0.288	8038	0.773	0.000	0.001	0.302	8029	0.762
Previous knowledge internet safety	-0.003	0.003	-0.794	8038	0.427	-0.003	0.003	-0.809	8029	0.419
Online behavior	-0.003	0.001	-1.807	8038	0.070	-0.003	0.001	-1.803	8029	0.071
White	0.001	0.002	0.609	8038	0.542	0.001	0.002	0.604	8029	0.546
Black	0.003	0.003	1.084	8038	0.279	0.003	0.003	1.083	8029	0.279
Hispanic	-0.007	0.006	-1.117	8038	0.264	-0.007	0.006	-1.111	8029	0.267
Random Effects	Variance	Chi	i-square	df	р	Variance	Chi	-square	df	р
Level 1 and Level 2										
Intercept	0.025	8	201.469	1469	*0.000	0.025	8	194.130	1469	*0.000
Time	0.001	2	385.963	1583	*0.000	0.001	2	382.795	1583	*0.000
level-1	0.028					0.028				
Level 3										
Intercept	0.000		105.239	108	>.500	0.000		103.572	105	>.500
Model A Deviance = -2658.11; # parame	eters = 71					 Model B Devi 30	iance = -	2661.44; #	‡ parame	ters =
*p < .01										
p < .01										

Intellectual Property Kr	owledge: Theft	Scale, with In	nteraction T	erm	
 Fixed Effect	Coefficient	SE	t-ratio	df	k
Intercept	0.650953	0.048432	13.441	107	*0.00
intercept by					
Treatment/Comparison	0.379237	0.115673	3.279	107	0.00
Site 1	-0.09532	0.047652	-2	107	0.04
Site 2	-0.12626	0.047106	-2.68	107	0.00
Site 3	-0.12274	0.045471	-2.699	107	0.00
Site 4	0.014485	0.056076	0.258	107	0.79
Site 5	-0.00269	0.050575	-0.053	107	0.95
Treatment*Grade	-0.03976	0.017075	-2.329	107	0.02
Hours of curriculum	0.036155	0.018775	1.926	2082	0.05
Grade	0.024371	0.014474	1.684	2082	0.09
Age (from class mean)	-0.04137	0.014691	-2.816	2082	0.00
Sex	-0.08276	0.015611	-5.302	2082	*0.00
Number computers at home	0.02028	0.011388	1.781	2082	0.07
Computer skill	0.033101	0.009775	3.386	2082	0.00
When started using Internet	0.00004	0.004815	0.008	2082	0.99
Hours week Internet use	0.001238	0.001748	0.709	2082	0.47
Parental Supervision	0.006623	0.009689	0.684	2082	0.49
Comfort level with acquaintances	0.027272	0.005696	4.788	2082	*0.00
Previous knowledge internet safety	0.135416	0.025005	5.416	2082	*0.00
Online behavior	-0.02998	0.012918	-2.321	2082	0.0
White	0.022072	0.024331	0.907	2082	0.36
Black	-0.10143	0.036863	-2.751	2082	0.00
Hispanic	-0.08475	0.038687	-2.191	2082	0.02
Time	-0.00425	0.006089	-0.698	107	0.48
Time by					
Treatment/Comparison	0.102655	0.025592	4.011	107	*0.00
Site 1	-0.01151	0.00683	-1.685	107	0.09
Site 2	-0.00475	0.007098	-0.669	107	0.50
Site 3	-0.00435	0.008869	-0.49	107	0.62
Site 4	0.003943	0.011415	0.345	107	0.7
Site 5	-0.00477	0.006991	-0.682	107	0.49
Treatment*Grade	-0.01436	0.003911	-3.671	107	0.00
Hours of curriculum	-0.01551	0.00412	-3.765	2082	*0.00
Grade	0.003343	0.003426	0.976	2082	0.3
Age (from class mean)	-0.00649	0.003445	-1.883	2082	0.05
Sex	-0.0022	0.003545	-0.62	2082	0.53
Number computers at home	0.001805	0.002765	0.653	2082	0.51
Computer skill	0.006013	0.002147	2.801	2082	0.00
When started using Internet	0.000065	0.001231	0.053	2082	0.95
Hours week Internet use	-0.00034	0.000461	-0.728	2082	0.46
Parental Supervision	-0.00237	0.002373	-0.997	2082	0.31

### THEFT SCALE WITH INTERACTION

Intellectual Property Kn	owledge: Theft	Scale, with I	nteraction 1	Term	
Comfort level with acquaintances	-0.00267	0.001622	-1.646	2082	0.1
Previous knowledge internet safety	-0.01092	0.007739	-1.411	2082	0.158
Online behavior	-0.00198	0.003366	-0.587	2082	0.557
White	-0.00295	0.0048	-0.615	2082	0.538
Black	-0.01267	0.007691	-1.648	2082	0.099
Hispanic	-0.00382	0.009572	-0.399	2082	0.69
Time-squared	0.002473	0.003722	0.664	107	0.508
Time-squared by					
Treatment/Comparison	-0.01819	0.016499	-1.102	107	0.273
Site 1	0.010022	0.004396	2.28	107	0.025
Site 2	0.005153	0.004198	1.227	107	0.223
Site 3	0.003202	0.004363	0.734	107	0.464
Site 4	-0.00263	0.006729	-0.391	107	0.696
Site 5	-0.0048	0.004455	-1.077	107	0.284
Treatment*Grade	0.000624	0.002409	0.259	107	0.796
Hours of curriculum	-0.00436	0.003008	-1.448	2082	0.148
Grade	0.003189	0.00197	1.619	2082	0.105
Age (from class mean)	0.00117	0.002084	0.561	2082	0.574
Sex	0.006464	0.002702	2.392	2082	0.017
Number computers at home	0.00113	0.002063	0.548	2082	0.583
Computer skill	0.000171	0.001272	0.134	2082	0.894
When started using Internet	-0.00011	0.000746	-0.152	2082	0.879
Hours week Internet use	-0.00003	0.000296	-0.1	2082	0.92
Parental Supervision	0.002358	0.001729	1.364	2082	0.173
Comfort level with acquaintances	-0.00126	0.001032	-1.222	2082	0.222
Previous knowledge internet safety	0.002943	0.004414	0.667	2082	0.505
Online behavior	-0.00108	0.001947	-0.557	2082	0.577
White	0.000293	0.003616	0.081	2082	0.936
Black	0.007773	0.004945	1.572	2082	0.116
Hispanic	-0.00192	0.00567	-0.338	2082	0.735
Random Effects	Variance	0	hi-square	df	р
Level 1 and Level 2					
Intercept	0.056		5044.292	1902	*0.000
Time	0.001		2517.322	1902	*0.000
Time-squared	0.000		2296.375	1902	*0.000
level-1	0.078				
Level 3					
Intercept	0.006		246.284	107	*0.000
Time	0.000		157.139	107	*0.001
Time-squared	0.000		145.875	107	*0.008
Model Deviance =7133.47; # parameter					
*p < .01					

Internet Sa	fety Scale, with	Interaction	Term		
Fixed Effect	Coofficient	SE	t rotio	df	
Fixed Effect	Coefficient		t-ratio		p
	2.395806	0.121722	19.683	107	*0.000
intercept by	4 40 4700	0.040054	5.077	407	*0.000
Treatment/Comparison	1.434733	0.240054	5.977	107	*0.000
Site 1	-0.22954	0.121866	-1.884	107	0.062
Site 2	-0.09226	0.117539	-0.785	107	0.434
Site 3	-0.38407	0.128413	-2.991	107	0.004
Site 4	-0.25373	0.13667	-1.857	107	0.066
Site 5	0.004124	0.116269	0.035	107	0.972
Treatment*Grade	-0.13375	0.035212	-3.798	107	*0.000
Hours of curriculum	0.092437	0.037287	2.479	2083	0.013
Grade	0.081866	0.027786	2.946	2083	0.004
Age (from class mean)	-0.09134	0.032931	-2.774	2083	0.006
Sex	0.022566	0.033287	0.678	2083	0.498
Number computers at home	0.031795	0.030005	1.06	2083	0.29
Computer skill	0.19951	0.021798	9.153	2083	*0.000
When started using Internet	-0.03238	0.011692	-2.77	2083	0.006
Hours week Internet use	0.003648	0.004459	0.818	2083	0.413
Parental Supervision	0.057718	0.022419	2.575	2083	0.01
Comfort level with acquaintances	0.047348	0.011971	3.955	2083	*0.000
Previous knowledge internet safety	0.553606	0.057459	9.635	2083	*0.000
Online behavior	0.104272	0.029778	3.502	2083	0.001
White	-0.03962	0.04732	-0.837	2083	0.403
Black	-0.25849	0.069342	-3.728	2083	*0.000
Hispanic	-0.23278	0.083637	-2.783	2083	0.006
Time	0.022449	0.018931	1.186	107	0.239
Time by					
Treatment/Comparison	0.310361	0.063992	4.85	107	*0.000
Site 1	-0.0081	0.022314	-0.363	107	0.717
Site 2	-0.02203	0.020779	-1.06	107	0.292
Site 3	-0.02174	0.021631	-1.005	107	0.318
Site 4	-0.01425	0.024721	-0.576	107	0.565
Site 5	-0.01434	0.019895	-0.721	107	0.472
Treatment*Grade	-0.03302	0.00933	-3.539	107	0.001
Hours of curriculum	0.012526	0.009328	1.343	2083	0.18
Grade	0.002416	0.007551	0.32	2003	0.749
Age (from class mean)	-0.01965	0.008443	-2.327	2003	0.02
Sex	-0.01903	0.007314	-3.427	2083	0.02
Number computers at home	-0.02307	0.006706	-0.705	2083	
					0.48
Computer skill	0.000963	0.00507	0.19	2083	0.85
When started using Internet	-0.00271	0.002575	-1.053	2083	0.293
Hours week Internet use Parental Supervision	-0.00073 0.007548	0.00087	-0.84 1.32	2083 2083	0.401

### SAFETY SCALE WITH INTERACTION

Internet Safe	ety Scale, with	Interaction	Term		
Comfort level with acquaintances	0.004478	0.002683	1.669	2083	0.095
Previous knowledge internet safety	-0.02258	0.01392	-1.622	2083	0.105
Online behavior	-0.03741	0.006692	-5.59	2083	*0.000
White	0.00942	0.01142	0.825	2083	0.41
Black	-0.03091	0.016391	-1.886	2083	0.059
Hispanic	-0.00028	0.017967	-0.015	2083	0.988
Time-squared	-0.01025	0.007259	-1.412	107	0.161
Time-squared by					
Treatment/Comparison	-0.10039	0.027461	-3.656	107	0.001
Site 1	0.010156	0.007576	1.34	107	0.183
Site 2	0.002641	0.008186	0.323	107	0.747
Site 3	0.015883	0.008893	1.786	107	0.076
Site 4	0.018959	0.011918	1.591	107	0.114
Site 5	-0.00913	0.008479	-1.077	107	0.284
Treatment*Grade	0.00717	0.00415	1.728	107	0.086
Hours of curriculum	-0.01118	0.006529	-1.712	2083	0.087
Grade	0.005205	0.002969	1.753	2083	0.079
Age (from class mean)	0.008167	0.004819	1.695	2083	0.09
Sex	0.005426	0.004994	1.086	2083	0.278
Number computers at home	-0.0005	0.003832	-0.129	2083	0.897
Computer skill	0.004164	0.003296	1.263	2083	0.207
When started using Internet	-0.00073	0.001438	-0.509	2083	0.61
Hours week Internet use	0.000054	0.000639	0.084	2083	0.933
Parental Supervision	0.00051	0.003363	0.152	2083	0.88
Comfort level with acquaintances	-0.00403	0.001712	-2.354	2083	0.019
Previous knowledge internet safety	-0.0145	0.009358	-1.549	2083	0.121
Online behavior	0.007207	0.00416	1.732	2083	0.083
White	0.000414	0.007252	0.057	2083	0.955
Black	0.014159	0.009786	1.447	2083	0.148
Hispanic	0.00709	0.010133	0.7	2083	0.484
Random Effects	Variance	C	Chi-square	df	p
Level 1 and Level 2					•
Intercept	0.370		7209.606	1908	*0.000
Time	0.008		2997.551	1908	*0.000
Time-squared	0.001		2330.061	1908	*0.000
level-1	0.286				
Level 3					
Intercept	0.028		235.794	107	*0.000
Time	0.001		216.576	107	*0.000
Time-squared	0.000		145.037	107	*0.009
Model Deviance =23412.09; # parame	•				5.000
*p < .01					

Predator Identif	ication Scale, v	vith Interact	ion Term		
Fixed Effect	Coefficient	SE	t-ratio	df	р
Intercept	3.737153	0.159375	23.449	107	<u>م</u> 0.000*
intercept by	0.707100	0.100070	20.440	107	0.000
Treatment/Comparison	1.724535	0.303635	5.68	107	*0.000
Site 1	-0.40489	0.151723	-2.669	107	0.009
Site 2	-0.36267	0.15236	-2.38	107	0.019
Site 3	-0.41048	0.163517	-2.51	107	0.014
Site 4	-0.04579	0.18338	-0.25	107	0.803
Site 5	-0.03892	0.147574	-0.264	107	0.792
Treatment*Grade	-0.2079	0.045677	-4.552	107	*0.000
Hours of curriculum	0.055567	0.052044	1.068	2083	0.286
Grade	0.120841	0.036641	3.298	2083	0.001
Age (from class mean)	-0.15021	0.046761	-3.212	2083	0.002
Sex	-0.35811	0.045557	-7.861	2083	*0.000
Number computers at home	-0.01585	0.0421	-0.377	2083	0.706
Computer skill	0.09571	0.028932	3.308	2083	0.001
When started using Internet	0.001974	0.016096	0.123	2083	0.903
Hours week Internet use	-0.01105	0.006776	-1.631	2083	0.103
Parental Supervision	0.025064	0.032246	0.777	2083	0.437
Comfort level with acquaintances	0.113132	0.017659	6.406	2083	*0.000
Previous knowledge internet safety	0.419814	0.100908	4.16	2083	*0.000
Online behavior	-0.03624	0.037133	-0.976	2083	0.33
White	0.122396	0.064361	1.902	2083	0.057
Black	-0.21297	0.100836	-2.112	2083	0.035
Hispanic	-0.39383	0.129905	-3.032	2083	0.003
Time	-0.05432	0.022795	-2.383	107	0.019
Time by					
Treatment/Comparison	0.185503	0.078211	2.372	107	0.02
Site 1	0.01058	0.02643	0.4	107	0.689
Site 2	0.021282	0.025264	0.842	107	0.402
Site 3	0.029787	0.029114	1.023	107	0.309
Site 4	0.11071	0.027467	4.031	107	*0.000
Site 5	0.030859	0.023344	1.322	107	0.189
Treatment*Grade	-0.02353	0.01171	-2.009	107	0.047
Hours of curriculum	-0.00296	0.014994	-0.197	2083	0.844
Grade	0.001024	0.008995	0.114	2083	0.91
Age (from class mean)	-0.01132	0.012448	-0.909	2083	0.364
Sex	-0.03192	0.010911	-2.926	2083	0.004
Number computers at home	0.002715	0.009196	0.295	2083	0.768
Computer skill	0.007126	0.006935	1.027	2083	0.305
When started using Internet	0.003332	0.003769	0.884	2083	0.377
Hours week Internet use	0.000303	0.00168	0.18	2083	0.857
Parental Supervision	-0.00125	0.008221	-0.152	2083	0.879

# **PREDATOR ID WITH INTERACTION**

Predator Identifi	cation Scale, v	vith Interact	ion Term		
Comfort level with acquaintances	-0.00644	0.004385	-1.468	2083	0.142
Previous knowledge internet safety	-0.04925	0.021302	-2.312	2083	0.021
Online behavior	-0.02469	0.008772	-2.815	2083	0.005
White	0.011995	0.016488	0.728	2083	0.467
Black	-0.01534	0.025684	-0.597	2083	0.55
Hispanic	-0.04845	0.029992	-1.616	2083	0.106
Time-squared	0.0215	0.015111	1.423	2083	0.155
Time-squared by					
Treatment/Comparison	-0.11904	0.040697	-2.925	2083	0.004
Site 1	0.003086	0.014883	0.207	2083	0.836
Site 2	-7.1E-05	0.015842	-0.004	2083	0.996
Site 3	0.001928	0.018788	0.103	2083	0.919
Site 4	-0.01308	0.019599	-0.667	2083	0.505
Site 5	-3.4E-05	0.014313	-0.002	2083	0.998
Treatment*Grade	0.010468	0.006044	1.732	2083	0.083
Hours of curriculum	-0.00063	0.007839	-0.081	2083	0.936
Grade	0.002783	0.005421	0.513	2083	0.607
Age (from class mean)	-0.00639	0.007452	-0.857	2083	0.392
Sex	0.013922	0.007432	1.872	2083	0.061
Number computers at home	0.003783	0.006204	0.61	2083	0.542
Computer skill	0.006584	0.00366	1.799	2083	0.042
When started using Internet	-0.00264	0.002026	-1.302	2083	0.193
Hours week Internet use	0.000831	0.002020	0.769	2083	0.190
Parental Supervision	0.00848	0.0049	1.73	2083	0.442
Comfort level with acquaintances	-0.00088	0.002627	-0.334	2083	0.083
Previous knowledge internet safety	0.016996	0.014566	-0.334	2083	0.730
Online behavior	-0.00176	0.005924	-0.298	2083	0.244
		1	1		
White	0.011087	0.00871	1.273	2083	0.203
Black	0.023013	0.014498	1.587	2083	0.112
Hispanic	0.029224	0.01647	1.774	2083	0.076
Random Effects	Variance		Chi-square	df	n
Level 1 and Level 2	Variance			ui	p
Intercept	0.703		6936.776	1905	*0.000
Time	0.020		3030.112	1905	*0.000
Time-squared	0.020		2365.715	2019	*0.000
level-1	0.656		2000.710	2013	0.000
Level 3	0.000				
Intercept	0.015		164.713	107	*0.000
Time	0.013		146.609	107	*0.007
	0.001		140.009	107	0.007
Model Devience -22169 22: # neverent	1				
Model Deviance =33168.32; # paramet	19 = 19				

APPENDIX 12: LIST OF INDEPENDENT AND DEPENDENT (OUTCOMES) VARIABLES

# APPENDIX 12: LIST OF INDEPENDENT AND DEPENDENT (OUTCOMES) VARIABLES

Appendix	APPENDIX 12: LIST OF INDEPENDENT AND						
DEPENDENT (OUTCOMES) VARIABLES							
Name of Variable	Number of Items/ categories	Type of Variable					
Intellectual Property	2 Items	Outcome					
Knowledge: Media Scale	1=No; 0.5= I don't know;;0=Yes	(Knowledge)					
Intellectual Property	2 Items	Outcome					
Knowledge: Theft Scale	1=No; 0.5= I don't know;;0=Yes	(Knowledge)					
Internet Safety Knowledge	7 Items	Outcome					
Scale	1=Nothing at all; 2= A little; 3= some; 4= A lot	(Knowledge)					
Management Risk Scale	4 Items	Outcome					
	<ul><li>1= Not all likely; 2= A Little</li><li>likely; 3= Somewhat likely;</li><li>4=Very likely</li></ul>	(Knowledge)					
Predator Identification Scale	6 Items	Outcome					
	1= Strongly disagree; 2=Disagree;	(Knowledge)					
	3= I don't know; 4= Agree; 5=						
	Strongly agree						
Sharing Personal Information	3 Items	Outcome					
Scale	1= Strongly disagree; 2=Disagree; 3= Agree; 4= Strongly agree	(Knowledge)					
Knowledge of Computer	3 Items	Outcome					
Viruses Scale	1= Strongly disagree; 2=Disagree;	(Knowledge)					
	3= Agree; 4= Strongly agree						
Communication Scale	4 Items	Outcome					
	1= Not at all; 2= At least once; 3=	(Behavior)					
	A few times; 4= A lot						
Inappropriate Online	9 Items	Outcome					
Behavior Scale	1= Not at all; 2= At least once; 3=	(Behavior)					
	A few times; 4= A lot						
Comfort Level with Online	3 Items	Outcome					
Acquaintances Scale	1= A day or less; 2= A few days;	(Behavior)					
	3 = A few weeks; $4 = A$ few						
	months; 5= A year or more; 6= I never would						
E-mail Protocol Scale	4 Items	Outcome					
	0= yes; 1=No	(Behavior)					
Baseline Online Behavior	9 Items	Independent					
Scale	1=Never; 2=Less than one day a						

APPENDIX 12: LIST OF INDEPENDENT AND						
DEPENDENT (OUTCOMES) VARIABLES						
	week; 3=one day a week; 4= a few days a week; 5= Almost every day or every day					
Parental Supervision Scale	3 Items 1= Never; 2= Sometimes; 4= Most of the time; 4= All the time	Independent				
Previous Knowledge of Internet Safety Scale	13 Items Percentage of items answered correctly	Independent				
Sex	Girl Boy	Independent				
Race	<ol> <li>'White or Caucasian'</li> <li>'Black or African-American'</li> <li>'Native American or Alaskan Native'</li> <li>'Asian American or Pacific Islander'</li> <li>'Latino or Hispanic'</li> <li>'Mixed (More than one of the above)'</li> <li>'Other'.</li> </ol>	Independent				
Age	<ol> <li>1 '9 years old or younger'</li> <li>2 '10 years old'</li> <li>3 '11 years old'</li> <li>4 '12 years old'</li> <li>5 '13 years old'</li> <li>6 '14 years old or older'.</li> </ol>	Independent				
Grade	5 6 7 8	Independent				
Site	Davies County (5,6,7,8) Fayette County (5,6,7,8) Centura (5,6,7 Co), St. Paul (5,6,7 Tr) Lexington (6,7,8 Tr), Lexington (6,7,8 Co) Summit (6-8 Tr), Longfellow (6-8 Co) Longfellow (7 Tr), Irving (7 Co)	Independent				
Computer Skills	I don't have very good computer skills	Independent				

Appendix	APPENDIX 12: LIST OF INDEPENDENT AND					
DEPEND	ENT (OUTCOMES) VARIABLES					
	I have okay computer skills I have good computer skills I have very good computer skills					
Number of Computers at	None	Independent				
Home	1 2 or more					
Number of hours per week of	0	Independent				
internet use	.25 .50					
	1 1.25					
	1.50 2					
	2.5					
	3 5					
	7.5 10					
	15					
Grade when started using	I don't remember	Independent				
Internet	Preschool					
	Kindergarten					
	1 <sup>st</sup> grade					
	2 <sup>nd</sup> grade					
	3 <sup>rd</sup> grade					
	4 <sup>th</sup> grade					
	5 <sup>th</sup> grade					
	6 <sup>th</sup> grade					
	7 <sup>th</sup> grade					
	8 <sup>th</sup> grade					

APPENDIX 13: I-SAFE CURRICULUM TOPICS BY GRADE

# APPENDIX 13: i-Safe Curricululm Topic By Grade

i-SAFE Curriculum Scope and Sequence for Grades 5 – 8			
Lesson 1: Cyber Community Citizenship			
Grade 5	The Internet community is compared to the physical community, highlighting the following <ul> <li>Real people interact</li> <li>Examples of safe/appropriate and unsafe/inappropriate places</li> <li>Strategies for age-appropriate safe travel</li> </ul> Student activities: <ul> <li>Design a map/poster to illustrate safe and unsafe places in both communities.</li> <li>Use a choice of media/venue to share Internet safe travel tips with others.</li> </ul>		
Grade 6	<ul> <li>The Internet community is compared to the physical community, with a focus on rules and responsibilities as citizens.</li> <li>Student activities:</li> <li>Create a Venn diagram poster to illustrate a comparison of (1) places and (2) citizenship responsibilities, in the physical and cyber communities.</li> <li>Create a Cyber citizenship rule, and use a choice of media/venue to share it with others.</li> </ul>		
Grade 7	<ul> <li>The Internet community is compared to the physical community, with a focus on the following:</li> <li>Who participates</li> <li>How people interact</li> <li>The roles of community leaders</li> <li>Student activities:</li> <li>Interview students about their online activities.</li> <li>Interview other community members about their online activities.</li> <li>Use a choice of media/venue to share information about how people use the cyber community in a positive way.</li> </ul>		
Grade 8	<ul> <li>The Internet community is compared to the physical community, with a focus on evaluating</li> <li>Age-group</li> <li>Intended use</li> <li>The roles of community leaders</li> <li>Reliability of information</li> <li>Student activities:</li> <li>Create a Webpage evaluation tool.</li> <li>Evaluate WebPages.</li> <li>Use a choice of media/venue to share information about how to evaluate websites, and how to avoid inappropriate websites.</li> </ul>		

Lesson 2: Cyber Security		
	Cyber security issues are addressed, focusing on the following issues:	
Grade 5	• E-mail protocol and etiquette	
	• Attributes of viruses	
	• Consequences of spam, flaming, and viruses	
	Student activities:	
	• Participate in a game to illustrate how viruses spread.	
	• Design a brochure to inform about e-mail etiquette and safety.	
	• Use a choice of venues to distribute brochures.	
Grade 6	An overview of cyber security issues leads into a focus on:	
	Vocabulary associated with e-mail use	
	• Attributes of computer viruses	
	Consequences of malicious behavior involved in online communication	
	Student activities:	
	• Develop a top ten list of e-mail rules.	
	Create a slogan to reinforce the necessity of proper e-mail etiquette.	
	An overview of cyber security leads into a focus on the aspects of cyber bullying:	
	• Recognition	
	• Consequences	
	Techniques to prevent or discourage	
Grade 7	Student activities:	
	• Participate in a self-esteem activity.	
	• Create a skit or scenario about cyber bullying or computer viruses, which presents a problem and	
	<ul><li>appropriate solution.</li><li>Use a choice of media/venue to share information about cyber security.</li></ul>	
	Overview of cyber security issues, with details on specific threats and consequences of:	
	Computer viruses	
	• Trojan horses	
	• Worms	
Grade 8	• Hacking	
	Student activities:	
	• Complete a KEWL chart (KWLS-type).	
	• Complete a topic review crossword puzzle.	
	• Develop a way to share information learned about cyber security.	
	Lesson 3: Personal Safety	
	In an age and experience appropriate manner, investigate and identify key concepts associated with	
	responsible and safe Internet choices and behaviors as they pertain to:	
	• Providing personal information	
	Screen names and Passwords	
Grade 5	Online communication methods	
	Student Activities:	
	• Identify safe and unsafe passwords and online IDs.	
	• Illustrate cause and effect situations relating to online personal safety.	
	• Use a choice of media/venue to inform others about online personal safety.	
	Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to	
	investigate and identify key concepts associated with responsible and safe	
Grade 6	Internet choices and behaviors as they pertain to:	
	Providing personal information	
	Screen names and Passwords	
	• Online communication methods	
	Student Activities:	
	<ul> <li>Participate in a bingo review game.</li> <li>Use a shore of modio (veryon to inform others short online personal sofety)</li> </ul>	
	• Use a choice of media/venue to inform others about online personal safety.	

Grade 7	<ul> <li>Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible and safe</li> <li>Internet choices and behaviors as they pertain to:</li> <li>Providing personal information</li> <li>Screen names and Passwords</li> <li>Online communication methods</li> <li>Student Activities:</li> <li>Choice of online or offline information review game.</li> <li>Use a choice of media/venue to inform others about online personal safety.</li> </ul>	
Grade 8	<ul> <li>Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible and safe</li> <li>Internet choices and behaviors as they pertain to: <ul> <li>Providing personal information</li> <li>Screen names and Passwords</li> <li>Online communication methods</li> </ul> </li> <li>Student Activities: <ul> <li>Develop a set of Internet safety guidelines, and relate their use or lack of use to a real Internet crime story.</li> <li>Use a choice of media/venue to inform others about online personal safety</li> </ul> </li> </ul>	
Lesson 4: Predator Identification		
Grade 5	Investigate and identify key concepts associated with responsible and safe online interaction, with a focus on issues associated with Internet predators: • Key characteristics • Grooming process • Proactive techniques to reduce risk Student activities provide specific focus for grade level: • Participation in the ID Match-up game illustrates how screen names are used. • Share Internet safety knowledge with parents/guardians through a survey.	
Grade 6	<ul> <li>Investigate and identify key concepts associated with responsible and safe online interaction, with a focus on issues associated with Internet predators:</li> <li>Key characteristics</li> <li>Grooming process</li> <li>Proactive techniques to reduce risk</li> <li>Student activities provide specific focus for grade level:</li> <li>Participation in the Information game illustrates how indirect information is obtained.</li> <li>Share Internet safety knowledge with parents/guardians through a survey.</li> </ul>	
Grade 7	Investigate and identify key concepts associated with responsible and safe online interaction, with a focus on issues associated with Internet predators: • Key characteristics • Grooming process • Proactive techniques to reduce risk Student activities provide specific focus for grade level: • The Chat Race game is used to identify how predators in a chat situation obtain information.	
Grade 8	<ul> <li>Investigate and identify key concepts associated with responsible and safe online interaction, with a focus on issues associated with Internet predators:</li> <li>Key characteristics</li> <li>Grooming process</li> <li>Proactive techniques to reduce risk</li> <li>Student activities provide specific focus for grade level:</li> <li>Participation in the ID Match-up game illustrates how screen names are used; including predator example.</li> <li>Share Internet safety knowledge with parents/guardians through a survey.</li> </ul>	

Lesson 5: Intellectual Property		
Grade 5	<ul> <li>Investigate and identify key concepts associated with responsible use on the Internet, focusing on the following aspects of intellectual property:</li> <li>Attributes and types</li> <li>Definitions of copyright and plagiarism</li> <li>Techniques to avoid IP theft and plagiarism</li> <li>Student activities provide specific focus for grade level:</li> <li>Complete a KEWL chart (KWLS-type).</li> <li>Create original posters to illustrate the concept of intellectual property.</li> <li>Develop a way to share information learned about intellectual property.</li> </ul>	
Grade 6	<ul> <li>Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible use on the Internet, focusing on the following aspects of intellectual property:</li> <li>Attributes and types</li> <li>Definitions of copyright and plagiarism</li> <li>Techniques to avoid intellectual property theft and plagiarism</li> <li>Consequences on intellectual property theft</li> <li>Student activities provide specific focus for grade level:</li> <li>Complete a Persuasion chart.</li> <li>Create activities to promote information about intellectual property rights.</li> </ul>	
Grade 7	<ul> <li>Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to identify key concepts associated with responsible use on the Internet, focusing on the following aspects of intellectual property:</li> <li>Attributes and types</li> <li>Definitions of copyright and plagiarism</li> <li>Techniques to avoid intellectual property theft and plagiarism</li> <li>Consequences on intellectual property theft</li> <li>Copyright rules as they apply to student work</li> <li>Student activities provide specific focus for grade level:</li> <li>Complete a Cause and Effect chart.</li> <li>Create and share poems or jingles to promote information about intellectual property rights.</li> </ul>	
Grade 8	<ul> <li>Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to identify key concepts associated with responsible use on the Internet, focusing on the following aspects of intellectual property:</li> <li>Definitions of copyright and plagiarism</li> <li>Laws governing intellectual property</li> <li>Student activities provide specific focus for grade level:</li> <li>Playact a mock trial.</li> <li>Post, display, or broadcast mock trial and results.</li> </ul>	