

# R·I·T

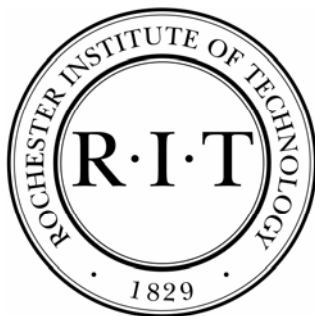
Rochester Institute of Technology  
Center for Multidisciplinary Studies

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The Rochester Regional  
Cyber Safety and Ethics Initiative

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*A proposal to keep children, adults and organizations  
safe in their computing activities*



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## Executive Summary

The Rochester Regional Cyber Safety and Ethics Initiative (The Initiative) is a non-profit partnership between the Rochester Institute of Technology (RIT), more than 20 area school districts, the Diocese of Rochester Department of Catholic Schools, Cambria Health Alliance (of Harvard Medical School) Division on Addictions, and regional offices of three national organizations, including: (1) The National Center for Missing and Exploited Children (NCMEC), (2) the Information Systems Security Association (ISSA), and (3) InfraGard, a program of the Federal Bureau of Investigation dedicated to information sharing between public and private sectors to help protect critical infrastructure.

The partnership has been created in an effort to develop programs that address the vital challenge of preventing children, families, and employees from engaging in unsafe and unethical behavior when using computers, the Internet, and other networked devices.

The Initiative partners are seeking to raise **\$100,000** in additional funding to support baseline research into:

- The behavior and attitudes of elementary and secondary school students (K-12) who are increasingly using computers and other networked devices
- The ability of teachers and schools to provide instruction in Internet safety, information security and cyber ethics; and
- Capabilities of parents to provide supervision and role modeling for the computing activities of their children

*“Our children are our greatest resource for the future and without the right level of training the cyber ethics gap is going to continue to expand.” Dr. Samuel C. McQuade III (R.I.T.)*

The proliferation of computing and networked electronic devices is one of the most profound technological changes in human history. Computers have transformed the way we live, the way we interact, and the way we work. The speed at which this transformation has occurred in society is unprecedented. However, any technological advancement provides potential avenues for abuse and harm and raises ethical issues which are rarely understood until malevolent use of the technology becomes apparent. We are now at such a point with computing and networked technologies.

Early studies of college students conducted at RIT, and national youth Internet safety studies have already confirmed a serious problem exists. Now is the time to start taking steps to address this critical health issue for our community, by conducting research, implementing cyber safety and ethics training, and working with the community at large to solve this problem. The fundamental premise for this Initiative is based in the following:

- In the absence of effective prevention education, adequate supervision and positive role modeling, information technology products and services are being used by children at all grade levels, Kindergarten-12<sup>th</sup> grade (K-12) to harm themselves and others;
- Children represent the “*next generation*” of employees who must know how to protect the digital assets and information of the firms in which they work by using computers responsibly;
- Professional security membership associations such as ISSA and InfraGard, consisting of managers and executives throughout our region and beyond, believe the growing problem of computer crime and abuse threatens firms, and their critical information and infrastructure.

## Program Objectives

To determine the full nature and extent of cyber offending and victimization among youth of all ages and thereby determine what should be done to intervene, RIT is now teaming with 20+ school districts, ISSA, InfraGard, the National Center for Missing and Exploited Children, and the Cambria Health Alliance Division on Addictions which is a teaching and research affiliate of Harvard Medical School.

In May-June of 2007 thousands of K-12th grade students, along with teachers and parents in school districts throughout the region will be surveyed.

In addition to informing development or improvement of programs the survey data will also be used to target delivery of needed Internet safety, information security and cyber ethics instruction in schools throughout the nation as provided through the National Center for Missing and Exploited Children "Netsmartz" program.

Over \$80,000 in funding has already been provided by RIT and participating school districts to launch this initiative. Additional funding is now being sought from concerned companies and organizations. The dollars raised will be used to pay for the personnel required to develop and administer multiple surveys, analyze the survey data, and to develop comprehensive reports on research findings that will guide area school officials, teachers, parents, and other concerned members of our community about how best to intervene.

The Rochester Regional Cyber Safety and Ethics Initiative will engage in and support four activities in the topical areas of cyber safety, information security and cyber ethics. These include:

1. Kindergarten-12<sup>th</sup> grade student, teacher and parent education
2. Public awareness about these issues and best prevention practices
3. Workforce training and instruction
4. Research and evaluation

## The Goal

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The ultimate goals of the Initiative are to:

- Act inclusively “from the ground up” with a safer, more secure and responsible computing future in mind
- Create, pilot test, implement and evaluate research-driven Internet safety, information security and cyber ethics instruction for students, parents, educators and the adult workforce
- Demonstrate how other communities throughout the nation can adopt and replicate cyber safety and cyber ethics education and training programs.

To achieve these goals The Initiative has developed a three-phase plan of work that initially focuses on conducting baseline research. This will be followed by selection and delivery of education in schools and adult training. Finally these interventions will be evaluated regarding their effectiveness on improving the safe and ethical computing practices. The Initiative is currently in Phase I and developing baseline survey instruments for K-12 students, teachers and parents.

To make your gift please contact:

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Director of Corporate Relations  
Development and Alumni Relations

585-475-4992 or email [greg.evershed@rit.edu](mailto:greg.evershed@rit.edu)

Thank you.

## The Research Plan

### **Phase I.** 2006 -2007 school year

- Baseline surveying of K-12 students, teachers and parents
- Analysis and reporting of survey findings
- Inventory and assessment of existing cyber safety and ethics instruction
- Selection of alternative pilot curriculum for adoption by school districts
- Enhance community awareness

### **Phase II.** 2007 – 2008 school year

- Implement pilot instruction within participating school districts
- Implement cost assessment and learning outcomes evaluations
- Pilot and conduct early assessment of adult training in the community
- Report evaluation findings

### **Phase III.** 2008 – 2009 school year

- Expand K-12 cyber safety and ethics education
- Evaluation of student learning, knowledge retention and behavioral changes
- Second round of student, teacher and parent surveys
- Community level survey of computing activities and ethics
- Analysis and reporting of survey findings
- Retarget and replicate best instructional practices
- Promote safe and ethical computing practices throughout the country

## Participating Organizations

The Initiative is guided by an Executive Committee representing a cross-section of the educators, industry representatives, and government officials from across the greater Rochester region. Executive Committee members for the 2006-2007 academic year are:

Thomas Gallagher  
Superintendent  
Wheatland-Chili School District

Sam McQuade  
Graduate Program Coordinator  
RIT Center for Multidisciplinary Studies

Sue Gray  
Superintendent  
Penfield Central School District

Dave Pecora  
RIT Associate Director  
Information Tech Customer Support  
Services

Mark Laubacher  
Director Communications & Tech  
Services  
Monroe BOCES 2

Michael Miller  
President  
Rochester Chapter of InfraGard

Chris Manasari  
Superintendent  
Brighton Central School District

Sr. Elaine Poitras  
Superintendent  
Department of Catholic Schools

Mary Connery  
Director of Staff Development  
Fairport Central Schools

Allen Scalise  
President  
Rochester Regional Chapter of ISSA

Ed Suk  
Executive Director  
New York Regional Office, NCMEC



## Rochester Institute of Technology

Founded in 1829, Rochester Institute of Technology is widely recognized as being at the forefront of career education. Today, the Institute has a combined graduate and undergraduate enrollment of approximately 15,000 students in its eight colleges. U.S. News and World Report has recognized RIT as one of the nation's leading comprehensive universities, and the number one comprehensive university in the East for its science and technology programs. The Institute has built this reputation through a commitment to working with government and industry to develop relevant and career-focused programs of study.

