

My name is Nate Fisk, and today I'll be presenting the results of my capstone project, which was the Rochester cyber safety and ethics initiative.

So what I'm going to go over is a little bit about myself, first of all, and the program that I went into, and some of the studies that I did along the way, so to speak.

Then we'll talk more about the project itself, the background, the studies that came before it, the initiative, the Rochester cyber safety and ethics initiative, and then I'm going to talk a little bit about the timeline over which the project was completed and my experiences throughout the research project itself.

I'll tell you a little bit about just how this project was situated within the local and state communities, and then of course discussing the project results, the lessons that came out of it, a little bit about future research needs, and then finally a quick discussion about what my experiences were within the RIT professional studies program it is.

So starting out, I'm obviously Nathan Fisk.

I began graduate work as a professional studies work a number of years ago after having done quite a bit of work as an undergraduate in an I.T. degree here at RIT.

I happened upon a course with Dr. Samuel McQuaid, and he and I hit it off doing research together.

That involved me enrolling in the professional studies program as the original cohort of the securities technology program.

However, I ended up taking quite a few classes out of the communications department, and I ended up taking so many that at one point the graduate chair of that program came to me and suggested that I simply just take a few extra courses and end up with a degree in communications in media technology.

I ended up taking that opportunity, and ended up with quite a few additional credits left over.

And because of the flexibility of the program itself, I was actually able to use the credits from the original degree I did, and the extra credits I had left, and I ended up taking another couple of courses, doing quite a bit more research with Dr. McQuaid and the initiative, and ended up with a second degree in professional studies, which of course I'm finalizing today.

And that essentially came through as the initiative really took off, and ended up having some level of funding to support a student like myself.

So what exactly was it that we were aiming to do with the Rochester cyber safety ethics initiative?

Well, originally back when I started my research as an under grad, there were a number of concerns over youth internet safety.

I'm sure all of you have seen on the news in one way shape or form some concerns, whether it's Chris Hanson on "Dateline"

describing the online enemies already in your home, or whether it's the U.S. Congress trying to keep the internet devoid of sexual predators, or those of you in academickia the youth internet surveys funded and conducted in 1999 and 2004.

But really the question that we had here at RIT was are those concerns well placed.

It seems there's an overwhelming emphasis on the adult child predator online and going after children who are simply using the internet.

We weren't entirely sure that was the case.

So especially because computer crime was becoming an increasing concern among schools and other organizations, and even here at RIT.

We were seeing students engaged in these activities rather than some anonymous person online.

So we thought that we would create a study -- or a number of studies to start to measure and understand the nature and extent of these forms of activities.

So in April 2004 we started with a paper-based study which measured a wide variety of different computer crimes and abuses, in addition to victimization online by students, and a number of other things, demographic

information, computer use, you know, what people are doing online and what types of computer crime and abuse they experience in their everyday lives online.

And it was highly successful.

Even that study itself was the largest of its kind at 873 students.

And that sparked a number of other surveys.

So in fall of 2004 we did another one using online using RIT's clipboard system, which had a number of limitations, and we eventually outgrew it.

It was also replicated offsite at SUNY Brockport where we essentially found out that with an exception number of behaviors college students tend to behave in similar ways online and therefore can be studied across different groups.

And in May 2005 we were asked by RIT to perform an evaluation of the Cdigix music service offered to students as an attempt to manage the music piracy issues we were perceived to have.

So we did a piracy comparison between the Cdigix users themselves and the students not using Ctrax.

As we began examining the results from all four studies, not only here at RIT, but throughout the community, at school districts, other types of community meetings, we began to hear from administrators at the primary and secondary level that they were experiencing these types of behaviors as well through their students.

And there was quite a demand for there to be some research done at that level.

And so Dr. McQuaid began to formulate a research plan, and essentially that developed into what is now known as the Rochester regional cyber safety and ethics initiative.

The goals of the project were to measure the nature and extent of online victimization among K-12 students, just as the RIT survey itself was.

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All of the data that came in from the school district, which allowed us to identify these participants, and ensure that none of it was improperly used, and that it was all encrypted properly throughout the process.

Of course I mentioned the turnkey training on the last slide.

I also developed that and personally administrated it to the district on a district-by-district basis, and of course given my I.T. program I provided on call technical support throughout the survey participation period.

So overall this project was very heavily entrenched in the local and state communities.

We partnered with a large number of school districts right off the bat.

Many, many.

We had a huge response as we began to talk to school administrators at superintendents' meetings and other various functions, and we did have quite a few districts that agreed to partner with us and agreed to participate in the initiative in some way.

Of course not all the districts actually allowed their students to participate in the survey itself, given that it was a very lengthy and difficult process, but a large number of them did contribute monetarily and additionally helped in the design of the research and in a number of other ways.

But in addition to the school districts, we also had a number of other organizations who assisted us in a number of ways, including the national center for missing and exploited children, FBI infraGARD, the Monroe- or leans BOCES2, etc., and this gave us a larger audience to speak to.

This project wasn't as much about the kids as it was how the actions of adults as working members of society play a role in how kids interact online as as role models, as supervisors, and how we might examine the use of computer crime and abuse through the actions of students themselves, and eventually use that as a stepping

stone to start to create training programs, not only for students, but also for teachers and for the work force in general.

So overall we ended up surveying almost 14,000 students.

13,773 total students, survey participants, in addition to a couple thousand of teachers and parents.

This alone represented the largest study that had ever been done computer crime, let alone youth computer crime.

And as such, we received fairly heavy media coverage across both local and state media outlets.

Of course all throughout this time the "Dateline" NBC specials had been happening, and we were hoping to counteract those messages to a certain degree, demonstrating with the data that we received that it wasn't just these bogeymen going online to exploit children sexual, but it was also the children themselves doing it to each other.

As I mentioned previously we presented those findings at the 2007 conference in Washington, D.C., it was received very well, despite some confusion in the audience.

A lot of our work eventually culminated in a cyber staff development workshop in the fairport district.

We were contracted to actually go in and provide a series of talks with both faculty, staff, and other various schools -- others related to the school in some way, and essentially what happened there was that we, as a group, began talking about next steps for beginning to manage the phenomena of youth computer crime and abuse.

And additionally, the survey project continued after I had ceased involvement in the project, and later on eight additional districts in the fall of 2007 participated in the survey itself, and we ended up with a grand total of over 40,000 student participants across those 14 districts, one of the eight districts actually participated twice.

And hopefully it was our goal to begin to foster a slow shift in the perception of the role of youth in computer crime and abuse.

It's not just these online predators coming after kids.

It's not just sexual crimes either.

It's a wide range of activities which can be categorized as cyber abuse online, and it's not just adults.

It's also youth.

So what did I learn throughout the survey process about research itself?

One of the really largest lessons was creating and maintaining clear lines of communication.

We had a number of districts who had problems when the turnkey training was not actually given to the people doing the survey itself.

As such, there was a lot of confusion about how that process was to take place.

And it really ended up in a number of districts becoming quite a hurdle to overcome.

Additionally, it deserves mention, never underestimate local politics when you're doing research.

Not only did we end up really having to find a way to gain support at all levels of the organizational hierarchy across the various districts because what we found was that due to the sensitive nature of this material, many people who didn't entirely understand or approve of the project itself would tend to find ways to ensure that it was difficult for to us do the actual research, but as it was -- we were actually trying to help the students, that we were trying to understand what was going on, once we actually explained the project itself to these people, they ended up being very strong supporters, which is why I mentioned misunderstanding can quickly result in backlash across the organization.

Then finally the technical infrastructure across the various districts really varied, and doing the kind of research that has to be something that you're very aware of.

It ties back into the communications you give, because those need to be tailored to each individual district.

It tase back to the types of tools that you use because they need to be compatible with the environment in which they'll be placed, and that ended up being a crucial piece to this project as a whole.

So going into the future, and also hopefully some of the research I'll be doing along the way, I don't believe that despite the successes of this research project that our picture of youth computer crime and abuse is really entirely complete.

This was meant to provide baseline data, and beginning to understand what it was that was happening out there online with children.

And unfortunately I think it still needs a certain degree of context.

For example, how it is that we categorize what is and is not abuse and crime is extremely important.

So in our survey itself, we described forms of online deception, such as lying about your age, lying about your gender, so on and so forth as a form of abuse.

But recent research has shown that those forms of deception can actually play a critical role in maintaining the anonymity of children as they go online, particularly when they use social networking sites such as myspace and facebook, that lying about their age can in many ways protect them and maintain their own privacy.

So describing these types of activity as a form of crime and abuse targets it as a problem which as a society we have to solve in some way.

And that may eventually hurt some of the ways by which our own kids are determining ways in which they can actually protect themselves online.

Additionally, I think there needs to be more research into how and why the survey data that we gathered differs so radically from the various portrayals of computer crime and abuse, the concept of computer crime and abuse across social groups.

So why is it that in our data we see a wide range of activities, but in the media and in legislation we see very targeted types of communications pinpointing specific types of activities, namely sexual predators online.

And then finally how can we best counteract those more popularized notions of computer crime in order to gain awareness of different forms and the breadth of computer crime and abuse.

I argued that we need quite a bit of additional -- more qualitative research in order to bolster the survey results and get more of a rich picture of what's going on online with our children.

So finally, a little bit about professional studies itself.

Overall I found it to be an excellent program, but it's highly important to understand what the program is before you get into it, particularly if you plan to go on in further education, like I am, into a PH.D or some other degree.

My concentrations were in criminal justice and technology and security technology, and I certainly found that the multidisciplinary perspective provided by the courses in this program have you invaluable, particularly through my research efforts, you know, and now as I've gone on to do work as a doctoral student.

It's very important and very useful at every stage.

It's being able to move between groups of researchers and workers.

It's incredibly useful and can't be underestimated.

That said, the courses are useful, but they can never take the place of direct faculty mentoring.

If you do plan to do -- or enter into this degree program, it's absolutely necessary to find a faculty member doing work that you're interested in and becoming involved with that type of research or work, or whatever it is that you plan on doing.

The faculty here really are, in my opinion, top-notch, and they have a lot to teach you, but a lot of what they do have to teach happened outside of the classroom.

And fostering relationships like this really results in a number of opportunities, not just as part of the graduate program, but outside in the job world, moving on to different graduate programs, and so on and so forth.

Finally I just want to note that the multidisciplinary degree here really offers a highly-applied program, by which I mean you really get your hands on what it is that you're interested in.

You do those things and you learn by doing.

It's far less of the theoretical grounding that you get by really reading the various scholars in your field.

To a certain degree, that's placed on you as a student to kind of engage in on your own.
That can be extremely difficult moving on to different programs where they expect you to know to a certain extent basically the literature of your field.
However that said, you will gain an incredible wealth of hands-on experience doing research, which can really give you a leg up in other areas as you move on.
And that's all I have.
I'd like to briefly thank, of course, Dr. Samuel McQuaid for many years of training patients, certainly patients, and continued friendship.
I hope to do more work with him moving on to the future.
My parents, of course.
How can you do this type of work and not at some point thank your parents.
And in the end, my wife Elizabeth for encouraging me and of course criticizing me at every turn.
It was very helpful throughout that process.
And that's all I have.
Thank you very much for watching this video, however you're doing it.
And that's it.
Thanks.