

# Information Security Education for the Community – the Potential, the Challenges and the Fun

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# Pop-Quiz!

- Where is Holyoke Community College?



# Fame

- Which is the closest Hall of Fame
  - Basketball Hall of Fame
  - Baseball Hall of Fame
  - Volleyball Hall of Fame
  - Hokey Hall of Fame

# Pop-Quiz!

- The average per-capita income in Holyoke is about:
  - 16k
  - 26k
  - 36k
  - 42k

26.4% of the population below the poverty line

# HCC Famous Graduate

The founder of the following company is an HCC graduate:

- MassMutual
- Yankee Candles
- Boston Market
- Dunkin Donuts
- Staples

Mike Kittredge



# About HCC

- 61 year old institution
- 9,000 credit students annually
- 4,000 in noncredit courses
- the highest transfer rate of any community college in the state
- tuition and mandatory fees third lowest in the state
- 76 associate degree options and 41 certificate programs

# The players

- Radost Koleva, joined 2005
- Casey Storozuk ,Professor
- Sue Mackler
  - Dean of Business Division,  
Professor CIS
- Sharon Biskup
  - Department Chair, Professor  
CIS
- Jeff Hayden
  - VP for Business and  
Community Services





# The funding



## COPS 2

- Began 2004
- Ending June 2008

Women  
in IT

## CAITE

- Commonwealth Alliance  
for Information Technology  
Education
- Started Fall 2007
  - Ending 2009



Conference room  
with **Windows**

# Challenges/Advantages

## We have:

- Grant Support
  - Direct or indirect
  - Grant rules
- Freedom
- Teaching load
- Creativity, Flexibility
- Students
- Passion

## We do not have:

- Consistent funding
- Consistent professional development opportunities or budget
- Legal and company restrictions
- Lab Support

# Long, long time ago ....

Fall 2005

- Few students
- 1 degree
- No integration across curriculum
- No one knew what it was about
- No transfer opportunities
- No community programs
- No awareness of the program existence

# We built it (but will they come?)

- The lab
  - COPS 2
  - \$250 000
  - Dedicated
  - 36-42 workstations
  - Removable drives are your friends
  - State-of-the-art Kittredge center, opened Spring 2006



# Look inside the curriculum

- Started out ambitiously- developed 8 classes
  - Introduction
  - Security Administration
  - Firewalls
  - OS Security
  - Disaster Recovery
  - Web Security
  - Network Security Fundamentals
  - Network Defense and Countermeasures
- User Support, Help Desk Curriculum
  - requires 2 Security courses, up to 4 possible
- 2 year long certificates – managerial and technical
- All CIS program allow Security electives

# Initial recruiting efforts

Standard approaches:

- Career fairs
- Information emails
- Brochures
- Summer Institute – free classes, COPS 2
- Class visits and information sessions

# Something happens

**ING YOUR MONEY**

MARCH 25, 2007

SECTION D

on of large numbers of **foreclosures** – resulting in an  
y of houses on the market in some regions – and  
– making it harder for some people to buy homes –  
ampen real estate markets around the country

Staff photo by MARK M. MURRAY  
her husband, Isaiah Harris, stand out in front of their Springfield home.

**A WAVE OF**

**VALLEY VOICES**

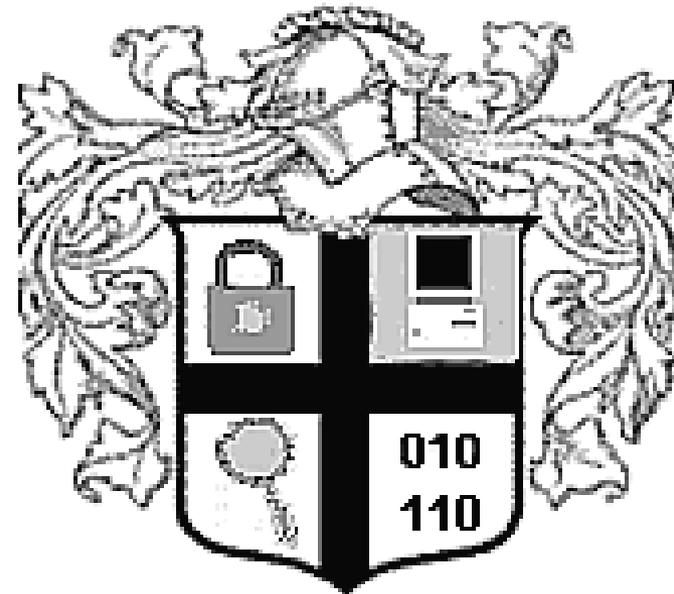
KATHY MOORE photo  
Radostina Koleva is an information security instructor at Holyoke Community College.

Identity theft afflicts everyone

It pays to take some precautions.

By RADOSTINA KOLEVA

- The Republican
- The HCC Eavesdropper
  - Newsletter
  - Student work
- Personal Connections



# The PVISAC conference 2007

Pioneer Valley Information Security and Assurance Conference 2007

– [www.hcc.edu/pvisac](http://www.hcc.edu/pvisac)

- Stats 2007: Students 25, Faculty 21, Business 13, School Administration 6, Unidentified 2
- Variety of sponsors
- 4 guest presenters

# Community connections

- S
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– Digital natives

# The ISA café is built, Fall 2007

- Living Dangerously?
- **Got Information? Got Security?**
- Phish and Spam .. is what's for dinner\*
- **Cybercrime: Puppies and Trojans and Hackers, Oh, My!\***
- Love boat and Computer for two
- **We can cater to your needs! We can prepare Information Security and Assurance training exactly to your taste and needs and serve it in our state-of-the-art facilities at Holyoke Community College.**

\* Very Spicy

# Community programs

Fall 2007/ Spring 2008, COPS 2, CAITE

- Channel 40 – we offer a degree in ....  
– .....
- Workforce development connection
- **Information Security Student Expo**  
– Upper management
- Dental Connections
- Non-credit instruction

# Funding the expo

- How do students fund anything at a CC?
- **Bake your way to Security!**
  - Teamwork
  - Customer service
  - Communication skills
  - Time management
  - Event marketing



# The expo

- 2 classes
  - SEC 263 – Operating System Security
    - Security consultants - center
  - SEC 105 – Principles of Information Security and Assurance
    - Poster presentations - perimeter
- Make sure they come
  - Student will do about anything for BONUS points

# Expo time





# The c



# PVISAC



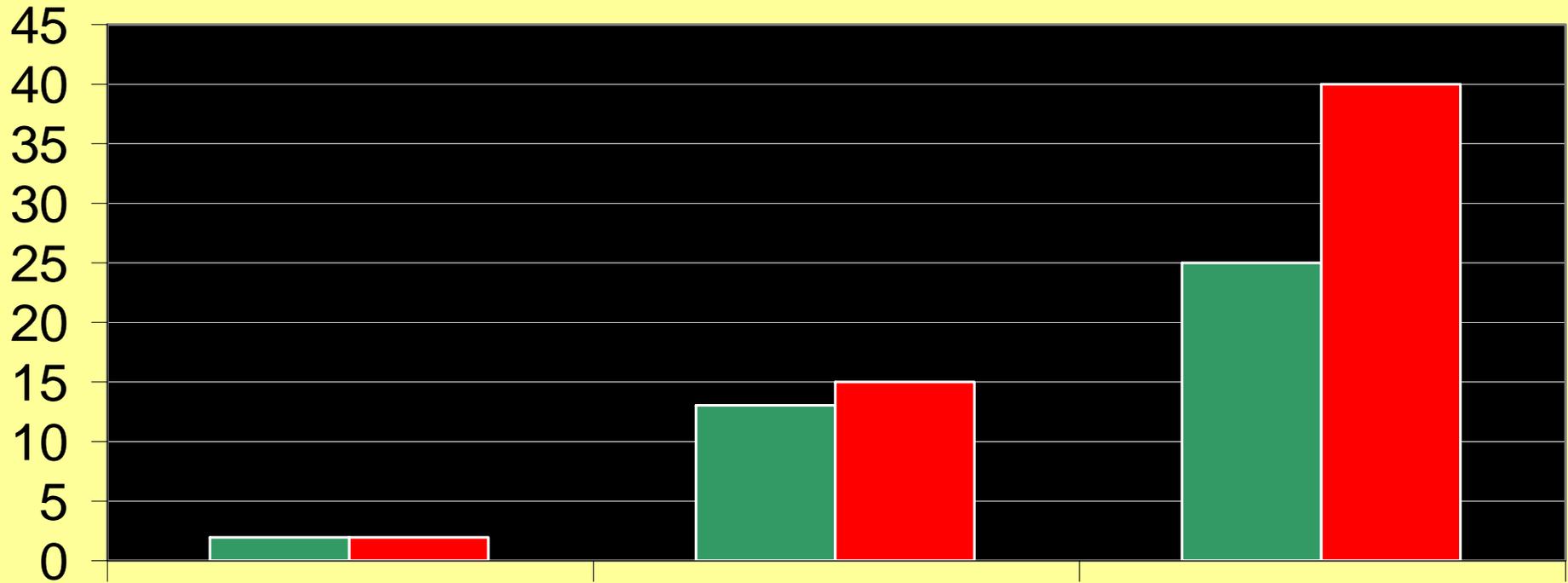
# Three years ago and now

## Fall 2005

- Few students
- 1 degree
- No integration across curriculum
- No one knew what it was about
- No Transfer opportunities
- No community programs

## Fall 2007

- 40 students
- 1 degree, 2 certificates
- Elective for all CIS majors and BUS
- Buzz
- Some transfer
- Variety community programs



Fall 2005

Fall 2006

Fall 2007

■ Estimates new students  
■ Total enrollment

# The conference – annual?

- PVISAC 2008
  - Different Sponsorship: CAITE
  - Greater Holyoke Chamber of Commerce
  - High School Students
  - Reserve the date April 17, 2008

8:10am - 9:00am Information Security: In the Workplace and Beyond,  
**Kevin Andryc, WISER**

9:10am -10:00am Social Psychology and Information Security  
**M. Kabay, Norwich University**

10:30am -11:20am Security Awareness - Technology and Employees  
Working Together, **Nancy Heath, MassMutual**

11:50am -12:50pm Security Business Elements and Legislation in  
Health Care , **Sue Miller, HealthTransactions.com**

# The challenges

- Non-credit courses
  - Did not run
- Paid training to businesses
- Full transferability of the curriculum
- Recruit women
- What worked

# What is next?

- More transfer opportunities to 4-year institutions
  - IT minor, UMass
- More connections with businesses
  - Information session planned
- Internship opportunities and job placements
- What worked?

**Questions and suggestions?**