USING ONLINE LEARNING COMMUNITIES TO RECRUIT WOMEN AND MINORITIES IN COMPUTING

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By

Project Goal

This NSF-funded project is designed to:

 Recruit a greater number of women and minorities (African-Americans, Hispanics, and Native Americans) into an IT-related major

There are six such majors at ISU

- Information Systems (ITK)
- Telecommunications Management (ITK)
- Computer Science (ITK)
- Industrial Computer Systems (Technology)
- Business Information Systems (Accounting)
- Accounting Information Systems (Accounting)

Population and Sample

The project draws from a population of 1700-plus ISU students in the Finite Mathematics course (Math 120), taken by mostly first- and secondyear students

 Math 120 fulfills (partial/full) math requirement for these computing majors at ISU

Section 8 of Math 120 taught by Sherry Mersch participated in the project in Fall 2008

Section enrollment was 165 students (sample size)

Methodology

Student Learning Communities

- Seminars
 - Students interact informally after class with invited computing professionals, most weeks during the semester
 - Goal is to give students a better sense of the range of opportunities in computing careers, and humanize the field

Online Blog

- Fits the student culture
- Combines solitary reflection and social interaction
- Can be a powerful promoter of creative and intuitive thinking

Review of Literature: Online Learning Communities

- Principles Underlying Online Learning Communities
 - (Ref: Gartner Research; C. Rozwell & D. Morello, Oct. 2008)
 - Are Self-Selecting
 - Different from Organizational Units
 - Make an Effective Recruiting and Retention Strategy
 - Are Inclusive
 - Are Efficient; News Travels at Lightning Speed
- Right Approach to Content:
 - (Ref: Gartner Research; J. Lundy, Sept. 2007)
 - Engaging, relevant content for all stakeholders

Profile of Bloggers

Students who bought into project goals and were Internet savvy were selected to be part of the blogging team

- All Males
- Three Caucasian and One Hispanic

Three undergraduates; One graduate student

Art Technology, History, and Computer Systems majors

Technology Education (grad. program) and Psychology

Here come three sample postings from the blog—

10/6/08: An Inside Look at Google!

October 6, 2008



Hi Everybody,

How many times a day do you use Google? I use it about a million times a day. I can't imagine life without Google. Here is a video about what it is like to work at Google. It seems like a pretty sweet job. If you like math, science, and/or technology maybe you have a future as a "Googler". After viewing, don't forget to take the corresponding Blackboard Assessment for extra credit!

Thanks!

11/10/08 Cisco and Technology Learning

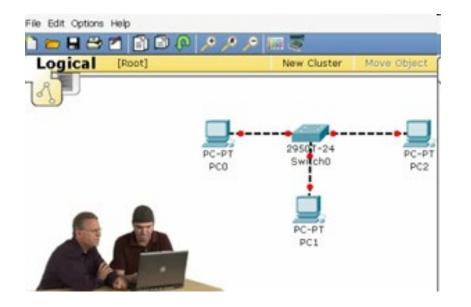
November 9, 2008

As you might know, Cisco is a company dedicated to engineering hardware and software technologies for communications and networking. Cisco devices are virtually everywhere and therefore technological and especially computer systems careers often require students to learn about Cisco devices.

One way for college students to demonstrate their Cisco expertise are the Cisco certification exams; a very long list of exams are available; they are divided by area of knowledge. However, usually the basic CCNA (Cisco Certified Network Associate) is what most technology programs in college level initially prepare students for. What is surprising is that not only technology students seem to obtain great benefit from taking these certification exams, but as shown by studies such as the "Indiana University CCNA six month program follow up", CCNA programs had an "education effect on high school students and an "employment effect" on community college students in the United States".

Programs that encourage Cisco learning are established and organized by the Cisco Learning Institute founded by Cisco in 1999. It is a non-profit organization that "promotes the effective, appropriate use of technology to advance learning". The institute often awards students around the world who demonstrate commitment to networking education and learning.

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Marisa Mariscotti is an example of one of forty students recently awarded worldwide with the 2008 Panduit Excellence scholarship, one of the CCNA awards offered by the Cisco Learning Institute. She is a student at CNIT—a community college in San Francisco. What is special about her case – besides the fact that she is the only woman in the United States awarded – is that her career is not technological as one might think, but rather artistic. "Marisa is a professional modern dancer "Her interest in technology is just part of her efforts to build a wider skill set and variety of knowledge.

Technological advancement is available for everyone seeking to expand their professional experience and anyone can find great benefit from technological training. Cisco classes are just an example of it, but it goes well beyond it; any technology-related expertise is very well appreciated in the real world work environment.

Thanks,

XXXXX

10/09/2008: Google implements preventative "drunk emailing" feature!

October 8, 2008

Today an engineer named Jon Perlow at Google Labs unveiled a new feature to Google's email service called "Gmail". This innovative feature is something that I'm sure everyone wishes they would've had at some point in their lives. Perlow wrote the feature because:

> "Sometimes I send messages I shouldn't send. Like the time I told that girl I had a crush on her over text message. Or the time I sent that late night email to my ex-girlfriend that we should get back together. Gmail can't always prevent you from sending messages you might later regret."

Now, one could argue that such a feature is unnecessary but it's great that the coders over at Google are allowed to have a sense of humor and can express themselves creatively at work.

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The feature is pretty simple and works like this:

"When you enable Mail Goggles, it will check that you're really sure you want to send that late night Friday email. And what better way to check than by making you solve a few simple math problems after you click send, to verify you're in the right state of mind?"

So, assuming that the user is intoxicated to the point where he or she is unable to perform basic math, the feature will not allow the email to be sent. "By default, Mail Goggles is only active late night on the weekend as that is the time you're most likely to need it. Once enabled, you can adjust when it's active in the General settings." Of course this feature is just for fun and is completely optional to use at all, but it's great knowing it's there if I need it!

Thanks!

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Can you guess which of the posts were most popular? Least popular?

Student responses to these posts

Google recruiting video

- 109 respondents
- 3% didn't like it; 81% liked it. Mean likeability: 4.09 (where 5 is high).

Cisco certification article

- 69 respondents
- 33% didn't like it; 29% liked it. Mean likeability: 2.90
- Drunk e-mail prevention article
 - 107 respondents
 - 2% didn't like it; 88% liked it. Mean likeability: 4.28