National Business and Industry Leadership Team (BILT) Meeting for Networking and Convergence Technology

Tuesday, February 12, 2013

AGENDA

1. Welcome
2. Clarification of National BILT
3. IT industry trends
4. Knowledge Skills Assessment
5. NSF and DOL topics
6. Student mentoring
7. Preview of Working Connections
8. Job forecast survey
Clarification of National BILT for Networking and Convergence Technology

Setting the context

- National Convergence Technology Center
  - National Advanced Technological Education (ATE) Center
  - National Science Foundation (NSF) funding
  - Primarily in the area of networking infrastructure/mobility/data communications, 8 consortium partners in 6 states

- National Information, Security, and Geospatial Technologies Consortium
  - National DOL TAACCCT grant
  - Focuses on 4 IT specialty areas including networking
  - Consortium partners from 7 colleges in 6 states
Setting the context

- Both grants have tight integration with businesses, letting them lead, not just advise, and this has produced positive benefits for students throughout the CTC Center’s life
- DOL grant is using CTC’s business processes

National Convergence Technology Center

- Processes developed under the Regional Center for Convergence Technology
- A National Science Foundation Center based in Frisco, TX at Collin College
- Created in 2004 to revitalize IT education in the North Texas region
- Approach with businesses applies to creating/maintaining/reinvigorating any technology program
National Convergence Technology Center

PARTNERS

26 Colleges in Convergence College Network (in 13 states)

Convergence Technology Center program mentoring and training for community colleges
National Convergence Technology Center

26 Colleges in Convergence College Network (in 13 states)

- Anne Arundel Community College MARYLAND
- Brevard Community College FLORIDA
- City College of San Francisco CALIFORNIA
- Clark State Community College OHIO
- Cleveland Community College NORTH CAROLINA
- Daytona State College FLORIDA
- Diablo Valley College CALIFORNIA
- Florida State College at Jacksonville FLORIDA
- Fox Valley Technical College WISCONSIN
- Guilford Technical Comm. College NORTH CAROLINA
- John A. Logan College ILLINOIS
- Lansing Community College MICHIGAN
- Louisiana Delta Community College LOUISIANA
- Metropolitan Community College NEBRASKA
- Northwest Vista College TEXAS
- Ohlone College CALIFORNIA
- Orange Coast College CALIFORNIA
- Ozarks Technical Community College MISSOURI
- Polk State College FLORIDA
- Porterville College CALIFORNIA
- San Jacinto College TEXAS
- Santa Ana College CALIFORNIA
- Seminole State College OKLAHOMA
- Tarrant County College TEXAS
- Waukesha County Technical College WISCONSIN
- Wiregrass Georgia Technical College GEORGIA

GOALS

- Create convergence degrees and certificates driven by business need
- Provide professional development for faculty
- Recruit and retain underserved students
- Disseminate products and service
National Information, Security, and Geospatial Technologies Consortium

BACKGROUND AND GOALS

- DOL TAACCCT Training Fund
  - TAA and other workers
  - Career pathways
  - Evidence-based with focus on evaluation
  - Emphasis on technology enablement
National Information, Security, and Geospatial Technologies Consortium

BACKGROUND AND GOALS

- DOL TAACCCT Training Fund
  - Four priorities
    1. Accelerate progress for low-skilled and other workers
    2. Improve retention and achievement rates to reduce time to completion
    3. Build programs that meet industry needs, including developing career pathways
    4. Strengthen online and technology-enabled learning

SPECIALTIES

- Programming, database, business intelligence (including mobile app development)
- Network infrastructure (Convergence and what others call ICT – Collin is lead)
- Cyber-security
- Geospatial technologies
Both grants leverage each other

Students benefit

Plan for BILT Leadership

- Glenn Wintrich, Business Chair for CTC has been working with grant leadership to formulate agendas and lead conversation during the meetings
- Suggestion
  - Glenn be the Business Chair for the combined BILT for 1 year
  - We select a First Vice-Chair who will take over as chair at the end of the year and will lead when Glenn is unable to be with us
  - We select a Second Vice-Chair who will take over as First Vice-Chair at the end of a year and will become the Chair at the end of two years
- Feedback?
IT industry trends

- “BYOD”
- Status of offshoring vs. onshoring
- IP telephony replacing old phone paradigm
- SDN
- Big data and cloud
- Which certifications are hot? \([\text{Global Knowledge's Top 15}]\)
- Hiring futures
- Mobility
- Wireless
- “SOHO” and home market spaces
- Others?
Knowledge Skills Assessment (KSA) discussion and analysis

KSA Status

• Completed May 2012 for Networking Specialty for DOL

• This information used and revalidated November 2012 for NSF

• Faculty currently cross referencing the KSAs to all the courses in all certificates/degrees for networking

• No need to duplicate BILT efforts in this area

• Curriculum patterns for certificates and degrees back to you next meeting
Obvious networking curricular needs

- Using NSF funding:
  Home Technology/SOHO curriculum
  aligned with CEDIA - Karl Dietrich and
  Brian Nelson, LCC and Bill Saichek, OCC

- Using DOL funding:
  High-use courses – with possibility of
  providing no-cost curriculum to students
  A+, Net+, Linux+
  New course – Cloud+

NSF-specific Highlights

- Speaking opportunities - Conferences, keynotes, professional development, classrooms
- College connections - Mapping to colleges in your regions and knowing their programs
- Collaboration on articles or white papers - partnerships, new technologies, internships, etc.
- InterLink collaboration - Labor market forecasts and IT Future Job Skills
DOL-specific Highlights

- Online courses being created for 25+ courses across 4 IT Specialties
- Virtual Laboratories installed at all 7 colleges (can support 8-10 added colleges each) to support students completing labs any time any place with Internet access
- Funding for specialized outreach and career coaching
- Text messaging services for intrusive advising and employment follow up
- Texas Workforce Commission follow up for employment data
- Heavy focus on evaluation with quarterly and annual reporting plus overall evaluation by University of Illinois team

Request for Mentoring Assistance from Business Team Members

- Virtual internship/externship project class
  - Meet with class 3-5 times during semester through webinar
  - Explain something about what you do in your daily work
  - Give feedback on their projects during the semester
  - Review and provide feedback on the final projects
- Need mentors for students throughout the semester on an informal or formal basis
  - One to one
  - Group mentoring
Working Connections IT Faculty Development Institute
Why Does It Matter?

Transforming professional development and impacting students since 2004.

“This opens the way for potential curriculum modification and expansion”.
~Eric Bockler
Working Connections participant

FACULTY IMPACT

• Since 2004 more than **841** faculty have attended Summer and Winter Working Connections as a means for Professional Development.

• **81%** of the faculty in the last 4 years has chosen a discipline that they were not currently teaching.
Utilizing the skills from Working Connections, faculty were able to make the following teaching improvements:

- Updated course material: 30%
- Provided new or updated existing exercises: 23%
- Delivered information differently: 20%
- Modified exam questions: 13%
- Other: 14%

“Simply the ability to offer virtualization, one of the “hottest” areas in Information Technology today!”
~William Saichek

What has this done for the students?

- Since 2009, 14% of faculty members returned to their colleges to create and implement 159 new degrees, certificates, specializations or courses using their newly acquired knowledge.
- A total of 1,467 sections have been taught in the subject area studied during the professional development institute.

“95% of the students have responded that they enjoy the interactive online.”
~Nancy Luthe
“I never thought I would be someone to get a degree or even go to school. I lost my job and I was looking to take a CompTIA A+ exam. I called the number to sign up for a date, and on the other line was Doug. Doug told me to come down to DVC and take his class. I started taking one class that semester and 3 years later I had an AS degree with a nice IT job. If it wasn’t for Doug pushing me to take classes at DVC, I don’t know where I would be. He made class fun while preparing me for the real work of IT. I’m glad that I made that call.”

~ A comment Doug Spindler received from a student who directly benefited from the instruction Doug received at Working Connections.

Overall Working Connections has impacted 37,674 students and faculty members!
Preview of 2013 Summer Working Connections

North, Lansing MI
June 3-7, 2013

Potential Tracks:
1. Ethical Hacking
2. Cloud Computing/Virtualization
3. Mobile App Development
Texas, Collin College  
July 8-12, 2013

Potential Tracks:
1 Forensics  
2 Effective Use of Social Media in a Classroom  
3 Cloud Computing/Virtualization  
4 Mobile App Development  
5 Wireshark  
6 Creating Technical Courses On-line  
7 MS Server 2008  
8 Alice  
9 GIS  
10 Business Intelligence

South, Jacksonville FL  
July 15-19, 2013

Potential Tracks:
1 EMC  
2 tbd  
3 tbd
Upcoming job forecast/labor market survey

Thank you!

Next BILT Conference Call Meeting
Tuesday, May 14  8:30am-10am CST