

Quarterly BILT Meeting Feb. 12th 2013

Meeting Minutes

Attendance:

Jon Hardesty – Collin College	Earl Simpkins – Telecom Electric Supply Company
Helen Sullivan – Collin College	Michael Meadows - Coley
Lewis Scaife – Collin College	Timur Mirzoev – Georgia Southern University
Jennifer McGarvey – Collin College	Karl Dietrich – Lansing Community College
Mark Dempsey – Collin College	Ernie Friend – Florida State College at Jacksonville
Ann Beheler – Collin College	Dave Nelson – VMware, Inc.
Heather O’Neil – Collin College	Chandra Dhandapani – Capitol One
Christina Titus – Collin College	Dan Myers – Citrix
Brian Smith – Dell Services	Glenn Wintrich - Dell
Tu Huynh – Comerica Bank	Candy Slocum – InterLink
Pierre Thiry – City College San Francisco	Jason Smith - Ratheyon
Allen Hemmi – AMX	Gary Toretti – AT&T
Tom Pensabene – Metropolitan Community College	Tommy Simpson – AT&T
David Keathly – University of North Texas	Yang Lai – The IS Group
Kurtis Sampson – Philips Healthcare	Jason Scott - Tyco
Matt Glover – AMX	Lenny Portelli – Seminole State
Barbara Errikson – Dallas Social Venture Partners	Zak Cernoch – Northwest Vista
Terryll Bailey – The Alison Group	Eliazar Martinez – El Centro Community College
	Bill Cullifer – Webprofessionals

Agenda: (Please reference Power Point presentation as well.)

1. Welcome & Introductions by Ann Beheler (Slides 1&2)
 - a. The National Science Foundation and the Department of Labor Grants have decided to bring both BILT teams together in effort to be respectful of your time.
 - b. Overview of the Agenda (Slide 2)

2. Clarification of National BILT by Ann Beheler and Helen Sullivan (Slides 3-15)
 - a. One of the most important topics we discuss as a team is the industry trends which help our colleges forecast changes that need to be addressed in the curriculum and gather information they can pass along to students.
 - b. Setting the Context : We want the BILT Team to lead us, not just guide us due to the tremendous benefit this group is to the students

- c. National Convergence Technology Center by Helen Sullivan (Slide 6)
 - Our goal is to align the student's education with the job expectation and trends.
 - d. National Convergence Technology Center Partners (Slide 7)
 - e. Convergence College Network (Slides 8& 9)
 - f. National CTC Goals (Slide 10)
 - g. National Information, Security, and Geospatial Technologies Consortium Partners by Ann Beheler (Slide11)
 - The DOL grant was built on the four National Science Foundation Centers
 - Partner Rio Salado will be posting curriculum online
 - h. NISGTC Goals (Slide 12&13)
 - Involves a heavy emphasis on virtual labs and extensive data collection.
 - This is a 2 billion dollar national initiative that will assist those who lost their jobs at no fault of their own and create career pathways for high school students.
 - i. NISGTC Specialties (Slide 14)
 - Collin College is the lead for networking
 - Meeting will be held soon regarding Mobile App Development
 - Separate BILT Meetings will be help for Cyber Security and GIS. Many of you may want to participate in those BILT Meetings as well.
 - j. Both grants leverage each other allowing the students to benefit. However, the grants do not duplicate work.
3. IT Industry Trends by Glenn Wintrich, Dell: Glenn is the business chair for the National CTC. He has been a valuable member of the team and pushes us to improve.
- a. Vice Chair and Second Vice Chair by Ann Beheler and Glenn Wintrich (Slide 16)
 - Both vice chair and second vice chair will need to be selected soon since the National CTC will continue to operate. Anticipating a transition during the next Face-to-Face BILT Meeting in the fall.
 - **Candy:** This is the ideal set up to ensure a smooth transition as the chair member's changes.
 - Any volunteers for the positions please email Ann Beheler
 - **Glenn:** My commitment involves 3-4 hours of preparation each quarter to set agendas, prep for meetings, help solicit speakers, trends, capstone courses, and finalize student presentations. You can be more involved and volunteer to support the colleges by traveling and attending numerous functions and or seminars throughout the year.
 - If a chair position isn't appealing to you there are other ways to be involved such as Tiger Teams.
 - If you have any questions please email Helen, Ann or Glenn.
 - Info graphics such as the image on Slide 16 are predictions that can give you a feel for what is to come. If the Info graphic says something will occur in 2020, expect to see it in 2016 due to the rapid acceleration in technology.

b. IT Trends discussion (Slide 17)

- **Glenn:** Smart Process Apps: SPA are developing over the next few years that help with labor intensive process (roles of human activity) and will be in a full sprint by 2018.
- **Gary:** Service attacks that are happening in financial security systems. Advanced persistence threats and denial of service attacks. These attacks will require a defensive measure or security layers and how you train students to decipher quickly to route the attacks into scrubbers to clean the packets before sending the good to the company and the bad to the sandbox. Recognize the anomaly and decipher it. Part of network infrastructure is very close to cyber security. Networking students should understand good practices to defend against these attacks coming in to their systems.
- **Chandra:** Students training to be IT professionals should have a view into programming.
- **Matt:** Security is like profit, a business has to have it. Cyber security should be inherent in each of the trainings. Can't decouple security from any of these topics.
- **Jason Smith:** Also preventing exploitations of hardware is an important part of this. Counterfeit, exploited hardware is a problem.
- **Ann:** Cyber security is a part of all that we do but the credit hours are limited to what we can put in to a certification. There are multiple certificates available, including special certificates in cyber security.
- **Glenn:** Two years ago "BOYD" was hot topic and now the big topic is socially enabled enterprise. By 2020, 50% of the job market will be self-employed following the Hollywood Model (contractors assemble in a team for one project only). This will cause people to use their own device and then security will need to be modified due to the new issues (crowdsourcing, Facebook). The question is how do we control the security then?
- **Gary:** It allows you to manage that dual business persona (proprietary data and security).
- **Mike:** People working on their own and those working remotely collaborating with them is a challenge from a management perspective, with in-office employees not being able to see them or the concern that remote workers do not feel a part of the business.
- **Dave:** VMware has gone to BYOD exclusively, this extends to academics going to only e-books and Skype tools are used to communicate with remote workers
- **Mike:** We use Skype and even have it in the break room so that remote workers can be a part of all aspects of the business. It is still hard to jointly review projects and stifles creative employees that need the feedback and face-to-face presence.

- **Glenn:** There is a new device coming out that is the size of a lighter and connects via HDMI to the cloud. All data is stored on the cloud making it portable. You should see this come out during the first half of the year and USB connections will follow. Product will sell for \$99.00 or less. Log on with a Bluetooth keyboard and mouse.
- **Dan:** So many of these trends overlap. Citrix is big on BYOD and it requires you to manage everyone since they all have needs to access programs. Cloud standards are emerging and many companies are still creating different clouds leaving the industry crying for best practices or national standards. I predict in three years we won't be discussing the cloud it will simply be how we work.
- **Candy:** Who will be setting the standards for the cloud?
- **Matt:** Standards should be set by the cloud businesses collectively. Let it mature first, and then find ways to regulate and standardize it. Otherwise, you're quashing innovation.
- **Dave:** The standards will be industry driven.
- **Glenn:** Software platforms will track standards and collect best practices for record.
- **Candy:** Does this mean companies will interact to build the standard?
- **Dave:** Yes, there will be some collaboration because no one owns the cloud. There is no proprietary solution.
- **Glenn:** We are seeing a lot of people bringing out code. These companies will not keep it private and will make money on their ability to execute not on the code itself.
- **Matt:** I have concerns about some of the open source. Going back to BOYD, one of the harder platforms to secure is the Android. iOS is much easier and some companies will not want their data to be open source.
- **Dave:** I believe that problem will be solved by Android.
- **Glenn:** IP telephony, the adoption of softphones, Cisco, Avaya, how do you see that impacting students?
- **Mike M.:** We have a partner that actually does that. Technology helps people stay connected and you don't have to worry where they are. It will help with remote teams and workers. Technology is cool; hopefully, this is a simple enabling tool.
- **Glenn:** Microsoft Lync softphones are not just for voice. Conversations can go from IM to phone to sharing screens and allowing more interaction with workers. If you are within a network, this keeps people unified and allows access at their fingertips to do multiple tasks simultaneously.
- **Brian:** All trends are connected. If you're talking about softphones you see this on cell phones as well. You can add this app to Android which really ties BYOD to this as well.

- **Dave:** Work will migrate where it can be done better, faster, and cheaper so if students want to compete they need to know what businesses are looking for. It's a bad risk to focus on technology (like computing) that can be offshored. Move up the food chain to technology that can only be done here. IDC job forecast of technology cloud and computer sectors in March 2012 projected 14 million new jobs in IT. The idea is that we want to have virtualization and cloud computing in our schools because it won't take long for offshore entities to take off with this. The US should take the lead now.
- **Barbara:** Having spent several years working with EDS some of the work is coming back because of the difficulties of managing projects. Students onshore who are really well educated and equipped with the proper skills will be more worthy of handling the job than offshore labor.
- **Dave:** Economics can be difficult if you are going to work off shore. The labor costs less, yes. But you have to lay out specifically what you want and realize it may be cheaper but it has to be defined so thoroughly that after all the QA and re-working is completed you aren't saving all that much. What you think will be a 1/3 savings turned out to be 10-20% because of the extra work.
- **Barbara:** You may even have to send your own people to help with management which is a large expense in itself.
- **Dave:** Unless you have someone on the ground then offshore won't produce what you need.
- **Chandra:** There will always be onshore skilled jobs for students; there will be a demand for offshore commodities as well. Jobs will cycle back onshore.
- **Matt Glover:** I have had consistent problems working offshore and have brought back many projects. The model may not always work. Spend two months training offshore staff, then they'd quit.
- **Glenn:** To tie back some comments made. Offshoring has proven unsuccessful when you have to have entry level positions in charge of project management duties as well. Students need to have a portfolio showing project management and presentations. Those are the areas of need offshore where workers mostly just follow a script. Then it becomes less about the price and more about quality.
- **Barbara:** Is there anything being done to be recognized for device recognition?
- **Ann:** We will work with all colleges.
- **Dan:** There is mobile device software; I think education needs to build in curriculum at the architect level.
- **Glen:** How to do an architect level?
- **Ann:** We do have a project course that introduces the architect level. We will discuss how to maximize the 72 credit hours to ensure we are covering the material.

- **Glenn:** Changing gears and tying this back into the curriculum and student success, which certifications are hot and which are not?
 - **Dave:** Virtualization, Cloud Computing, professional VMware, CompTIA, EMC Cloud, and VDI would be strong suggestions for hot. VMware view and Citrix fall under VDI.
 - **Dan:** Hyper V Microsoft Certifications
 - **Glenn:** In the past it was “gold” to have a specialty; however, today you need to have a portfolio of certificates not just one. During Winter Working Connections we look at which tracks to offer to ensure we are preparing the educators with the most recent and most in demand.
 - **Mike:** Technology is not what it was 10 years ago, nor will it be what it is today 10 years from now. It’s an evolving technology. Today IT is the largest dollar expenditure in a business. We put solutions together that are cost effective.
4. Knowledge Skills Assessment (Slide 18-20) by Ann Beheler.
 - a. KSA description (Slide 18)
 - b. KSA Status (Slide 19)
 - c. Networking curricular need (Slide 20)
 5. NSF and DOL Topics by Ann Beheler and Helen Sullivan
 - a. Helen Sullivan addressed NSF Specific Highlights (Slide 21)
 - There will be numerous speaking opportunities that will allow you to share perspectives or give insight. Helen will reach out for volunteers and possible topics of interest.
 - Make connections with colleges in your area for possible involvement with Intern and Externships.
 - You may pair with someone from the college or another business to work on White papers and articles.
 - InterLink Collaboration: Candy Slocum and Glenn Wintrich both involved in IT Futures Forecast. Skills will be analyzed for the maturity and relevance so feedback may be provided to educators and also be reported back to the business community.
 - Heather O’Neil will also be conducting a Job Forecast Phone Survey as an aggregated roll up. This will also provide an opportunity to update contact information and allow us to connect one-on-one.
 - b. Ann Beheler addressed DOL Specific Highlights (Slide 22)
 - Two million dollars in virtual lab equipment that allows us to scale networking.
 6. Student Mentoring (Slide 23)
 - a. Opportunity to mentor students in a project class via webinar similar to a manager or coordinator without being on campus. We also have opportunities to mentor traditionally, answering questions and providing general guidance.
 7. Preview of Working Connections by Helen Sullivan and Mark Dempsey (Slides 24-35)
 - a. Review of Working Connections and its history, Ann Beheler.

- b. Facts and Statistics about Working Connections, Helen Sullivan.
 - c. Preview of Summer Working Connections, Mark Dempsey.
- 8. The Next BILT Meeting will be May 14th, 2013. Please mark your calendar.