

# Steps to Get Business and Faculty Working Towards Student Success

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# FACT

- Educators believe their graduates are prepared for work
- Businesses do not agree
- Depending on the study, percentages vary
- Percentages on each “side” are not always the same, but the trends match

# EDUCATION/BUSINESS MISMATCH

**96 percent**

of college and university chief academic officers said they are extremely or somewhat confident in their institution's ability to prepare students for success in the workforce

**11 percent**

of business leaders strongly agree today's college graduates have the skills and competencies that their business needs

John M. Eger, "Business and Education Executives Just Don't See Eye to Eye,"  
Huffington Post, 04/12/2014

# EDUCATION/BUSINESS MISMATCH

**42 percent**  
of business leaders agree

**72 percent**  
of educators believe their  
graduates are ready for work in  
an entry-level job

John Bersin, "Growing Gap Between What Business Needs and What Education Provides"  
Forbes.com , 12/10/2012

# MAJOR GOAL for All Technical Programs

- **STUDENTS** completing certificates and degrees are well-qualified for ready employment
- **BUSINESSES** are highly engaged

# Business and Industry Leadership Team

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- Developed/refined by National Convergence Technology Center National Science Foundation (NSF) Advanced Technological Education (ATE) Center led by Collin College

# Business and Industry Leadership Team

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- BILT Leadership is foundation of ALL the Center's work
- Process used for 25 years, but refined and scaled since 2004 through the work of the CTC (regional, now national)
- Used to address the downturn in IT in the early 2000's – primarily networking/cyber focused
- Shared with consortium of 64+ college and university partners
- Designed with lock-step cooperation with regional (and now national) businesses to ensure employment for graduates
- Also used for \$20 million TAACCCT national grant with 7 colleges in 6 states

# Business and Industry Leadership Team

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*Using the BILT process ensures...*

- College curricula align with what businesses want to hire 12-36 months into the future





# Business and Industry Leadership Team

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*The BILT model born from the idea that...*

- Businesses that co-lead the work hire students because they have a greater say in defining Knowledge, Skills, and Abilities (KSAs) they want in graduates/applicants
  - Steer your curriculum to align with THEIR needs
- Business Advisory Council “on steroids”
- BILT works for any Career/Tech Education discipline or grant

# Business and Industry Leadership Team

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## *When and Who*

- Meets quarterly, not 1-2 times per year (less than 4x/year is “out of sight, out of mind”)
  - Once a year in person
  - Three times a year virtually via web meeting



# Business and Industry Leadership Team

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## *When and Who*

- Right people on the BILT
  - High-level technical executives
  - First-line hiring managers
  - Technicians
  - HR representatives, as long as they are not the sole reps for a company



# Business and Industry Leadership Team

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## *When and Who*

- Regional BILT advising multiple colleges



# The Ideal, Engaged BILT

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- Identifies entry-level KSAs (which colleges map to curriculum then provide feedback to businesses on what they can and cannot do)
- Shares sector trends and job forecasting
- Develops deep, invested relationships with colleges preparing their future employees (they want to hire your graduates)



# Best Approach for Recruiting Members

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- Work with area groups that work with employers
  - College President and Board of Trustee members
  - Chambers of Commerce
  - Economic Development Corporations
  - Discipline-specific professional associations

# Best Approach for Recruiting Members

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- Do not use e-mail – it’s too easily ignored
- Phone calls or hand-address, stamped letters
- Value proposition for the prospective BILT members (“WIIFM”)
  - Outline their involvement
  - Specify the minimum time commitment
  - Request an RSVP
  - Follow up

# The Job Skills Validation Process

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*Curriculum aligned based on solid business-driven process originated in the US Air Force*

- Annual process
- Modified DACUM to identify KSAs needed in graduates (4-6 hour meeting)
- Faculty determine how to address KSAs through curriculum by cross-referencing desired KSAs to existing courses and developing new modules or courses to fill gaps
- National work feeds local BILTs





# The Job Skills Validation Process

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*Curriculum aligned based on solid business-driven process originated in the US Air Force*

- Facilitator – process expert keeps the meeting running
- Recorder – enters the votes in real-time into a spreadsheet and prepares the meeting minutes
- Subject matter experts
- Faculty – attend as observers



# The Job Skills Validation Process

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# The Job Skills Validation Process

*Curriculum aligned based on solid business-driven process originated in the US Air Force*

- Employers discuss and rank the job skills on a scale of 1 to 4 (1 = least important, 4 = most important)
- Consensus is not the goal
- Record the votes
- Focus on skills needed for an entry-level employee coming out of the college's program 12-36 months in the future



National Business and Industry Leadership Team (BILT) Knowledge Domains - updated August 2017							
<p>* Skills for an entry-level IT worker looking for a job 2-3 years from Fall 2017.</p> <p>* Be sure ITIL (change management and root/cause analysis) elements are covered as needed in every course. ISO 9000/9001 Quality Management criteria.</p> <p>* Consider on-site tours.</p>							
KSA	Knowledge, Skill, Ability	Topics	# votes (4 = most important)				
			4	3	2	1	Avg
K1	Linux / Unix OS	Current within 3 years, as of now the operating system of the IoT	13	2			3.9
K2	Windows Server OS	Current within 3 years, need this background for AWS and Azure	2	12	1		3.1
K3	Operating System Maintenance	Includes topics such as account mgmt, installing apps, command line, directory, file structures, os scripting, config modification, backup/restore, os admin, scheduler, stopping/starting services, change control, documentation, awareness of KPI and SLA/OLA, log files and patches, ACL.		15			3.0
K4	OSI Model	<p>Layer 1: physical layer            Layer 2: data link layer            Layer 3: network layer            Layer 4: transport layer            Layer 5: session layer            Layer 6: presentation layer            Layer 7: application layer</p> <p>Provide basic framework for how it all works, including how cloud computing has impacted the conceptualization of the seven layers. Plus and awareness of IP multimedia services.</p> <p>Understand that OSI is the framework for all problem solving and troubleshooting</p>	15	1			3.9
K5	Enterprise Mobility and Collaboration	<p>Collaboration Technologies - Making enterprise mobility work. A basic understanding of the building blocks for how enterprise mobility operates. Also an awareness of the security requirements.</p> <ul style="list-style-type: none"> <li>* PSTN</li> <li>* messaging</li> <li>* VOIP</li> <li>* videoconferencing</li> <li>* Bluetooth</li> <li>* presence</li> </ul> <p>Enterprise Mobility - Applying collaboration technologies to solve business problems. Operational-level proficiency to install, use, configure, operate from a user viewpoint. Understand domain and relevance. Case studies.</p> <ul style="list-style-type: none"> <li>* messaging</li> <li>* use VOIP</li> <li>* Skype-like</li> </ul>	7				4.0



# Reporting Back to the BILT

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- Give them feedback to show they are valued
  - Explain how you plan to change the courses, degrees, and certificates to align with their needs
  - Let them know how their feedback is being implemented
- If they want changes you cannot make, discuss the reasons (don't ignore them) and see if they can help remove barriers
- Send out meeting minutes within two weeks of meeting

# Three Virtual Meetings Annually

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- Trends identified to get head-start on curricular changes
- Informal forecast of future employee need
- Program review for multiple colleges (certificates/degrees)
- Review/approval of major grant activities/ progress
- Other topics as appropriate



# Benefits to Students

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- Sought after by BILT members because of their ownership of courses, certificates, and degrees
- First considered for opportunities (internships) before they graduate – because BILT members engaged with your program
- Mentoring from BILT members
- Participation from BILT members in workshops, capstone classes, job fairs

# Benefits to Faculty

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- Assurance they are teaching what industry wants
- Get assistance from BILT members to be guest speakers and help with recruitment events
- Alerted of future industry workplace trends in time for curriculum adjustment
- Receive free or reduced-cost professional development for faculty from BILT members
- Serve on externships with BILT member companies



# Benefits to BILT Members

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- Strengthen pipeline of “workforce ready” job candidates
- Develop professional relationships with other BILT members
- Give back to the community in a way that makes a real difference
- Know their time and their feedback is valued



# From a BILT Member's Perspective



# HOW IS A BILT DIFFERENT?

## ADVISORY:

- Data's exponential
- Industry advised
- Suggested KSA
- Business suggests enhancements to curriculum
- Business is not vested in long-term success of programs
- Ignored advice erodes business commitment

## BUSINESS-LED:

- Industry Led
- "Required" KSA
- Curriculum recognized by BILT
- Business has "skin-in-the-game"
- Business has the opportunity to reduce OJT (On-the-Job-Training)
- Business has ability to "give back" to community in a multi-generational life-changing way

# RESULTS OF AN ACTIVE BILT

- Curriculum aligned to produce workforce-ready grads
- Involvement in recruitment events
- Professional development for faculty
- Internships for students; externships for faculty
- Business mentoring for both students and faculty



# RESULTS OF AN ACTIVE BILT

- Guest speakers
- Co-authoring whitepapers
- Evaluation of capstone presentations
- Participation in panels at conferences
- Hiring of graduates



# What Can You Do?

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- Schedule quarterly meetings (web meetings are okay)
- Invite faculty to attend your meetings
- Allow the BILT members to regularly share their perspective on future trends
- Conduct annual job skills validation – vote in real-time (avoid surveys)
- Crosswalk the revised job skills to curriculum and make adjustments
- Report back to the BILT, make them feel valued

# Questions?

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# Resources

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- BILT Resources from the Convergence Technology Center
  - [www.connectedtech.org](http://www.connectedtech.org)
- Webinars on employer engagement from the Centers Collaborative for Technical Assistance:
  - [www.ATEcenters.org/ccta](http://www.ATEcenters.org/ccta)
- Mark Dempsey – [mdempsey@collin.edu](mailto:mdempsey@collin.edu)
- Ann Beheler – [abeneler@collin.edu](mailto:abeneler@collin.edu)



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