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; originally presented by John Colburn, Director, Skills for America’s Future, Aspen Institute, 01/20/15
42 percent of business leaders agree

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

Major Goal for All College Programs

- STUDENTS complete certificates and degrees and are well-qualified for ready employment or transfer
- EMPLOYERS are highly engaged and want to hire students

Implementing the Business & Industry Leadership Team (BILT) Model helps to meet both goals, and it’s proven effective.
Agenda for This Webinar

• Set context for origin of the BILT model
• Highlight benefits for students, faculty, and BILT members
• Explain absolute essentials of the BILT
• Identify who should be members of an effective BILT
• Discuss how to recruit and retain those members
• Introduce how to do the analysis of the Knowledge, Skills, and Abilities (KSAs)
• Introduce how faculty use the KSAs to determine curriculum
• Clarify differences between BILT model and Business Advisory Council in the words of a BILT chair
• Q&A
Origins of the Business and Industry Leadership Team Model

- Hired as Dean at Collin College to grow Information Technology (IT) and Engineering Technology (ET) enrollments just after 9/11 in 2001

- Then, the “Dot Com” BUST caused 70-100K workers to be laid off in these industries in North Texas, similar to the nation

- Enrollment declined and continued to decline precipitously

- Dilemma – how to grow enrollments
My Choices as Dean

• Essentially give up and wait out the downturn
  – Downsize programs and faculty associated with them

• Keep trying to recruit students as usual (wouldn’t have worked)

• Plan for the future with strong employer involvement
Other Contributing Factors

- Collin College had a small NSF project grant and had a good reputation with the NSF program officers.

- At least half of the Community and Technical Colleges in the nation were facing similar issues and needed transformative steps.

- My previous experience indicated:
  - When IT and ET employment goes down, the industries have always come back, but they come back with requirements for different skills.
  - In education, we have had to scramble to respond to changing curricular needs.
Our Opportunity - NSF Regional Center

• Work with regional business & industry to predict technical skills that would be needed when the downturn reversed and hiring began again

• Work with colleges regionally (and eventually nationally) to address
  – Employer predictions of technical skills required
  – Creation of curriculum to meet those needs
Our Approach in the Beginning

- Call to action with Community Colleges and major University in region
  - Face-to-face meetings, discussing our common enrollment decline

- Call to action with over a dozen business leaders in region
  - Phone calls asking for help, not money
  - Focus groups met, discussing their willingness and commitment to design the future

- Talks with the NSF Program Officer
  - Business Advisory Committee (BAC) seen as “rubber stamp” group
  - BILT approach was formulated based on prior work with employers
  - Regional Center proposed and funded
Our Results as an Example

- National CTC BILT now leads 64+ colleges nationally

- Colleges have their own local or regional BILTs leading their programs

- ALL program work depends on foundational knowledge from the businesses

Note:
- Name for the employer team really should be different from “Advisory” to distinguish that employers co-lead!
BILT Benefits Students

• 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
BILT Benefits Faculty

• 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
BILT Members Benefit

- 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
Bare-bones, Essential Elements of Business Engagement Without Regard for Exact BILT Process

• Businesses must
  – Co-lead programs
  – **Prioritize Knowledge, Skills and Abilities (KSAs)** they want graduates to have 12-36 months into the future
  – Predict **labor market demand**
  – Predict **trends**

• Faculty must
  – **Cross reference** KSAs to existing curriculum
  – **Update** curriculum to address KSAs needed by businesses
  – Provide businesses with **feedback** regarding implementation

• Works for any Technical Program at any size college in any location (urban, suburban, rural)
Take a Moment to Consider Your Current Business Advisory Team

• Are your employers
  – Highly-engaged?
  – Co-leading your program?
  – Prioritizing Knowledge, Skills and Abilities they want graduates to have 12-36 months into the future?
  – Predicting Labor Market Demand?
  – Predicting trends?

• Do your faculty
  – Cross reference KSAs to existing curriculum?
  – Update curriculum to address KSAs needed by business?
  – Provide feedback to businesses regarding implementation?

• Can these activities/relationships be improved?
Essential Element – BILT Co-Leadership

• Employers report they are more likely to hire graduates from programs for which they have curricular leadership responsibility

• Employers will assume this role (and more) if
  – Their time is respected
  – There is a method for ensuring that their input is consistently and seriously considered by the faculty members
  – They consistently receive feedback on their recommendations
Recommended BILT Meetings

- One meeting face-to-face annually to prioritize KSAs (2-6 hours annually)

- 3 other meetings annually, usually web meetings (1-1.5 hours)
  - Employers highlight upcoming industry trends
  - Informal forecast of future employee need
  - College provides faculty feedback regarding prioritized KSAs
  - Faculty can ask for advice
  - Opportunities for optional involvement are discussed

Estimated 10 hours per year for minimum commitment; other opportunities optional and take additional time
Why Hold More Than Two Meetings Annually?

• Building business engagement requires building relationships

• Consider how strong your relationships are with those whom you see only twice annually

• Out of sight, out of mind can prevail
Which Disciplines Can Use the BILT Model?

- BILT model has been implemented for widely different disciplines
- Approach applies to any AAS degree or certificate
- Can also be used for an academic program, though members prioritizing KSAs would then also include universities in addition to business representatives
Who should be on the BILT?

- 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
- Faculty are ex-officio members; they listen and ask questions
How to Invite Members of a BILT

• Talk with existing Advisory members to determine their interest in more intense engagement (don’t fire anyone)
• Create a target list of employers/people
  – Help from Administration and Board Members
  – Help from Chambers, Economic Development Corporations, Associations – word of mouth
• “WIIFM” principle – outline involvement and specify time requirement
• Send out printed letters (templates available)
• Follow up with phone calls
Creating the Proforma List of KSAs

• Do not assume you know what employers want in graduates

• ASK through the KSA process!

• Proforma KSA list is
  – A starting point for discussion
  – Should have no more than 75-100 items on it, maybe less
  – Employers may add, subtract, or modify items on the list
  – Largely a knowledge area list
Methods For Creating Initial KSA List

• May include multiple sources for information
  – Identify similar programs at other colleges, and start with the student learning outcomes of the courses in their program
  – Identify national standards where they exist
  – Involve a small number of employers to get started
  – Bureau of Labor Statistics O-net

• Drop identified KSAs into spreadsheet that will calculate employer input (template available)

• Leave blank rows for additions from employers during meeting
Skills Validation Mechanics

• Use the job skills spreadsheet that you will add to, subtract from, or modify

• Employers discuss and rank skills from 1 to 4, with 1 being the least important and 4 the most important with assistance from facilitator

• Facilitator reminds employers to focus on skills for an entry level employee coming out of the college’s program 12-36 months into the future

• Consensus is not the goal
Skills Validation Mechanics

• Recorder enters the votes into the prioritization spreadsheet

• Discussion is documented by minutes that are taken by someone other than the recorder
Validation Ranking Considerations

- Rating criteria considers
  - Importance
  - Level of proficiency
  - Time spent doing the skill
  - Difficulty – how difficult is the skill to learn?

- Discussion is extremely important
Validation Process

- Items with avg. of 3.0 or above are usually included in **curriculum**

- Faculty will "**map**" the skills/knowledge areas to existing courses

- Gaps will be identified, and **curriculum strategies** established for filling gaps

- Results and follow up will be reported back to the BILT
# Originally Ranked Individual Skills

## CTC Business and Industry Leadership Team for Convergence Technologies and related disciplines

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<th>Knowledge Domains</th>
<th>Rank</th>
<th>Avg</th>
<th>Comments</th>
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<td>0 2.00 Gaining importance</td>
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### Operating System Maintenance

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<td>Operating system administration (e.g., monitoring, process control, threads, upgrades and patching)</td>
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<tr>
<td>OS compatibility and interoperability</td>
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<td>OS Scripting</td>
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## Handling of Certification-Aligned Courses

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<td>4    3.56 Depends on whether servers needed</td>
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<tr>
<td>Wireless Certification CWNA</td>
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<td>3    3.00 Gaining importance</td>
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### Faculty Map to Classes to Identify Gaps

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National Convergence Technology Center
Important Features of KSA Analysis

• Face-to-face with discussion; NOT email prior to the meeting

• Full engagement by employers

• Recognizes that no college can train for a specific employer’s needs
Everyone Has a Role

- Industry Subject Matter Experts
  - Participate in rankings and discussion
- Faculty Subject Matter Experts
  - Attend as *active listeners* (may ask clarifying questions)
  - Cross-reference results to courses, identifies gaps, create curriculum (after meeting)
- Facilitator
  - Process expert responsible for *effectiveness of meeting*
- Recorder
  - Records rankings and discussion
- Note Taker
  - Takes minutes during discussion ranking
Providing Feedback to Employers

• Email minutes of the KSA meeting to them within two weeks of meeting

• Schedule the next meeting
  – Either face-to-face or online (generally preferred)
  – No more than 2 - 3 months after the KSA meeting

• Show employers
  – The course cross-reference to existing curriculum
  – Explain how you plan to change courses, degrees, and certificates to align with their needs
  – Which KSAs are covered by each course in the new certificates and degrees
  – How the certificates stack

And, if they want changes you cannot make, discuss reasons (don’t ignore them) and see if they can help remove barriers
BILT Approach Benefits

STUDENTS

FACULTY

BILT MEMBERS
Truly More Than an Advisory Council

- Business Advisory Councils often have the connotation of being rubber-stamp groups that merely review curriculum plans in a quick meeting

- BILT requires employers to CO-LEAD the work

- Good to change the name from advisory to BILT to emphasize co-leadership responsibility
View From a BILT Leader

**Matt Glover**

- CTO  Le-Vel
- Chair of the National BILT for Networking and Data Communication for National CTC
Differentiators between a business advisory council vs. BILT

**ADVISORY**
- Industry Advised
- Suggested KSA
- Business is suggesting 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 must be recognized by the BILT
- Business has “skin-in-the-game”
- Business has the opportunity to reduce OJT (On-the-Job-Training)
- Business has the ability to “Give Back” to the community in a multi-generational life changing way
SERVING ON BILT – DRIVING VALUE

We are in the business of employing the future of America.

BILT - What is in it for me?

STUDENT
- Delivering relevant, industry sought after skills
- Students more prepared to enter the workforce
- Early business engagement exposes students with business perspective & taxonomy (Mentoring, internships, externships and business graded capstone courses)

EMPLOYEE
- Entry-level employees with “hit-the-ground-running” skills
- Ability to tangibly give back to the community
- Ability to tap eager talent in transitioning to the workforce
- Time value realized and appreciated

PROFESSOR

BUSINESS LEADER
BILT Members May Help in Other Ways

- Guest speakers
- Co-authoring whitepapers
- Evaluation of capstone presentations
- Participation in panels at conferences
- Hiring of graduates
- And more!
Questions?
Resources

- BILT resources from the National Convergence Technology Center
  http://connectedtech.org

- Webinars on employer engagement/related topics - Centers Collaborative for Technical Assistance:
  http://www.atecenters.org/ccta

- abeheler@collin.com