Building and Deepening Employer Engagement

Business and Industry Leadership Team (BILT)

Ann Beheler, Ph.D.
PI, National Convergence Technology Center
PI, IT Skill Standards 2020 and Beyond
• 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
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
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
Other Results of an Active BILT

- Long-term membership of BILT members, even through job changes and relocations.
- Guest speakers
- Co-authoring whitepapers
- Evaluation of capstone presentations
- Participation in panels at conferences
- Hiring of graduates
- And more!
Introducing

Tu Huynh, VP of IT for Comerica Bank
Resources & Tools for Strengthening Employer Partnerships

Hope Cotner
Center for Occupational Research and Development
**Employer Partnerships**

- Must inform our programs, other partnerships
- Business-Industry Leadership Team sets the right tone
- Willingness to adopt a common language and “decode” unfamiliar terminology/acronyms
- Frequent, in-depth conversations about jobs and skills in demand in near future
- Be their talent development partner
Resources & Tools:

- Podcast Series
- Stackable Credentials Toolkit
- Tutorials

Access online: cte.ed.gov

National Initiatives > Credentials
Advancing Credentials Project

3-year initiative building on Mapping Upward foundation. Three focus areas:

1. **Engage employers** in deeper, more sustainable ways
2. **Expand career pathways** offering stackable credentials
3. **Facilitate non-credit/credit integration**
Reinventing Advisory Committees through BILT

- Past model: faculty-led industry advisory committee
- New model: Business Industry Leadership Team (BILT)
- Engage local industry to drive curriculum improvement, recruitment, and community engagement.
- Industry chair critical to team’s success and effectiveness
- New BILT collaborated to develop:
  - mission and vision statement
  - strategic plan
  - communications plan
  - annual focus area (student recruitment this year)
Advanced Manufacturing BILT
Committee Structure

Vision Statement:
Inspiring the Evolution of Tomorrow’s Advanced Manufacturing Workforce

Mission Statement:
Using diverse and creative leadership to increase community awareness and inspire engagement through the promotion of opportunities in advanced manufacturing
Employer Engagement Toolkit

Business and Leadership Toolkit

Download the BILT Guide for Strengthening Industry Commitment for Technical Programs

www.AdvancingCredentials.org/toolkit
Introducing…

Glenn Wintrich, Futurist in Residence, Interlink
(Recently Retired from Chief Innovation Office, Dell Services)
Academic/Industry Partnerships

National Science Foundation
Advanced Technology Education
Principal Investigators Conference
October 2018

James Guenther
Principal Investigator
NSF ATE (DUE 1600736)
Delgado Community College

Kevin Simpson
Autoimmune Technologies LLC.
No Magic Potion

- Time and effort
- Understand what your goals are
- At least 20% time spent outside of the building maintaining connections

"If you have a garden and you want to see things flourish, you have to tend to it," George P. Shultz

- Balance this with the rewards of finding the resources to accomplish your goals
Bio-Link CSO Networks

“we can be your lab for overflow or back burner projects.”
Collaborations with Industry, Autoimmune Technologies

- Collaboration/hiring as an adjunct on our NSFATE award with Dr. Kevin Simpson to design our cell culture class BTEC 286
- Direct input from industry to provide skills necessary for employment
- Industry expertise to solve problems
- Dr. Simpson serves on several national review committees
- Expansion of this concept to develop micro-CSO projects for student internships
Collaborations with Industry, The Pathology Lab

- Collaboration with Mr. Kipp Greicar
- Direct input from industry to provide skills necessary for employment
- Industry representatives as guest presenters.
- Industry expertise to solve problems

- Faculty Training in histology techniques and trends
  AUTOMATION OF IMMUNOHISTOCHEMISTRY IN THE ANATOMIC PATHOLOGY LABORATORY

  When Does it Make Sense?
  - Cost of automation vs. technician training
  - Benefits for industry and academia in training
  - “As ability to cope decreases, the need for an automated platform appears to increase.”
Collaborations with Industry, LaCell and Talaria antibodies

- Internships where students develop a product useful for new business ventures
- Students develop technical and soft skills necessary for employment
- Students purify antibodies at Delgado using FPLC techniques from sera provided by Talaria
- Students purify TdTomato protein that will be used as Antigen

Dr. Jeff Gimble, Xiying Gimble, Shawna Wicks

BTEC 275 Protein Expression & Purification

Bio-Rad and LigaTrap help with protocol development
Conclusions

• Not one size fits all.

• At the end of the day, collaborations are not with companies but with people.

• Business collaborations inspire new creative ideas
  • New course material
  • New collaborations
  • New company economic growth
  • New directions
INTRODUCING...

KEVIN SIMPSON, PI/RESEARCH SCIENTIST. AUTOIMMUNE TECHNOLOGIES, LLC