Gaining the Edge: Unlocking Potential

Presentation the 5th Annual Tri-Association Conference

Belleville, November 13, 2013
10:20-11:15 AM
Brad’s Challenge

1. What has the relationship looked like in the past between universities and industry?
2. How might technology around delivery of training and education change the relationship between PSE and industry?
3. How are the needs of industry changing the ways and means for developing, documenting and delivering training to their enterprise staff?
4. What trends are driving education—aging populations, multiple generations in business, ICT and skills gap?
5. What effect is the layering of ICT having on your program development and delivery?
6. Are there global issues pushing both PSE and manufacturing that we should be preparing for?
Challenge – Innovate -- Connect
University of Ontario Institute of Technology
“Canada’s STEM University”

• Created in 2002
• First class in 2003
• 200+ full time core faculty, in 7 Faculties
• 9800 students in undergraduate and graduate programs (including Ph.D.)
• Lap Top University
• Flexible learning environments
Strategic Priorities -- 2012-2016

• Prepare our graduates for the 21\textsuperscript{st} century workplace

• Build our strength and capacity through research, innovation and partnerships

• Be distinguished as a 21\textsuperscript{st} century workplace
Research Mandate

• International reputation for research excellence.
• Focused fields of research excellence.
• Research and scholarship that makes a difference – [and] will significantly improve Canada's quality of life and competitive advantage.

• **PARTNERSHIPS: A PRIORITY**
  – Researchers apply their knowledge to real-world problems while pursuing groundbreaking research work.
UOIT: A research intensive university

High Impact Research Areas

• Advanced Manufacturing for 21st Century Innovation
• Education for the 21st Century
• Energy & The Environment
• Human Health and Community Wellness
• ICT & Informatics
• Life Sciences & Biotechnology
The Changing University

• Education:
  – For Citizen Leaders
  – For Intellectual Leaders
  – For Community Development
  – For Economic Development
  – Responds to a Competitive Environment
    • New players
      – Online, Colleges, Polytechnics

– New approaches to education –
  • DL, MOOCs, Hybrid, Flipped classrooms
  • Work-place learning, coop
  • Entrepreneurship
The Changing University

Universities: “state assisted” not “state funded”

• Most revenues come from:
  • Students tuition
  • Students ancillary fees
  • Student Housing/Food
  • Books, clothing lines, etc.
  • Fund raising/Donations
  • Research grants and contracts
The Research University

- Encourages and Sustains Research & Scholarship
  - Collaborative
  - Trans-disciplinary
  - International
  - Big Data
- Engages in Partnerships
  - Academic
  - Community
  - Industry
- Promotes Regional and National Economic Development
- Competes and collaborates nationally & internationally
What was/is the relationship between universities and industry?

- Challenging

- Collaborative
  - Experiential Learning
  - R&D: Fundamental and Applied

- Evolving
  - Industry-friendly contracting
Universities: Engines are economic and social development

– By being in a region
– By engaging in practices that actively encourage and support economic development
What does it mean for universities to be engines of economic development?

❌ Not ‘in the business of producing “plug and play” graduates’ … [Universities engage students in] broad intellectual and personal development that enables graduates to thrive in a world that is constantly changing, a world that demands innovation and adaptability, a world in which they will change jobs frequently ….” Max Blouw, President, WLU, G&M Sept 3, 2013 http://www.theglobeandmail.com/commentary/universities-should-educate-employers-should-train/article14078938/

✅ Educational and research programs responsive to industry needs
What does it mean for universities to be engines of economic development?

- Educated people
- Market ready graduates
- New ideas/applied solutions
- Industry- and community-oriented research programs
- Industry partnerships
  - Fundamental and applied research
- Entrepreneurs
- Spin-off companies
Are there global issues pushing both PSE and manufacturing?
TALENT

• The next generation will change jobs 6-8 times over their career

• Many will want to create their own jobs
Fostering Student entrepreneurship

• “Firefly” Student Entrepreneurship Program
  – Available to all students
  – Entrepreneurship Boot Camp
  – Investment Seed Fund
  – Industry Advisory Committee

• Collaborations with regional incubators and accelerators:
  – IdeaHub
  – SPARK Centre
  – CORE21
Thank You

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