An approach to Innovation and Entrepreneurship Student Competition

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20 March 2015
OPEN Conference
Washington, DC
Known as Dixie College, opened in 1912 located in Cookeville and Putnam County, Tennessee and established as Tennessee Polytechnic Institute in by Gov. Thomas Rye on March 27, 1915. With 13 faculty members and 19 college students at the start of the 1916-17 academic year, TPI grew into Tennessee Technological University in 1965 with five colleges.

- TTU Currently has 7 Colleges and a School of Nursing
- Total enrollment of about 12,000
- College of Engineering has over 3000 students in BS, MS and PhD and the largest undergraduate engineering program in the State.
Goals and Initiatives

**Goal:** Create a culture of Innovation and Entrepreneurship at TTU

Techno-Innovation & Techno-Entrepreneurship

- Innovation Discovery Learning Institute (IDLI)
- CoE Makers by Design Roadshow - K-12 Outreach
- 2 CoE Innovation and Techno-Entrepreneurship Faculty Fellowships (McCord Fellowships)
- Campus-Wide Student Innovation and Entrepreneurship Competition (**TTU Eagle Works**)
TTU: Member of the 2014 Pathways to Innovation Program Cohort

12 Universities selected in December 2013
Led by Epicenter – Stanford University and managed by VentureWell

1. Cal Poly – San Luis Obispo
2. Cooper Union
3. Howard University
4. Michigan Tech
5. New Mexico State U
6. University of Pittsburgh
7. Tennessee Tech
8. Texas A&M
9. University of Massachusetts – Lowell
10. University of California – Merced
11. University of Nevada – Las Vegas
12. University of Wisconsin - Milwaukee
TTU is one of 153 universities signatory to a letter to President Obama published on June 18, 2014 – “National Makers Day” expressing commitment to incorporation “Making” into curriculum and promote in the community.

TTU is one of the universities who have become part of the Maker Schools Alliance.
TTU Eagle Works

- University-wide Innovation & Entrepreneurship Competition
- Eligibility: Undergraduate & Graduate students
- Four Tracks
  - Technovate led by COE
  - Traditional Entrepreneurship
  - Social Entrepreneurship
  - Creative Entrepreneurship
**Technovate**
The Technovate™ competition at Tennessee Tech (TTU) is an innovation competition for undergraduate students at TTU. Students can work in teams to develop and present inventions which will be judged by experts.

**Traditional Entrepreneurship**
Entrepreneurs are innovative risk-takers -- they develop an idea for a business, plan and organize the structure, and manage the venture while assuming full responsibility for both its failure or success.

**Social Entrepreneurship**
Compete in the social track if your idea involves creating a non-profit or attempts to affect social change. Judging will be based upon your ability to provide a measurable impact to society.

More Info
How to Pick a Track

Innovative plan or model to merge resources to provide goods or services of value

Profit Motive?

Social good Motive?

No

Yes

Traditional Entrepreneurship

Social Entrepreneurship

Not Eagleworks
## Competition Evaluation

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<th>Final Scoring</th>
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<tr>
<td><strong>Traditional</strong></td>
<td>30%</td>
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<tr>
<td><strong>Technovate</strong></td>
<td>30%</td>
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<tr>
<td><strong>Social</strong></td>
<td>30%</td>
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TTU Eagle Works

- Series of workshops to support team efforts (Intellectual property, mentorship, process, etc.) in partnership with Biz Foundry
- Communication channels with students:
  - Online announcements,
  - Facebook
  - Marketing and Entrepreneurship class by CoB to provide academic credit for Eagle Works
TTU Eagle Works

- More than 60 students participating in 12 teams
- Prototype awards given to teams in Technovate track, but other tracks can receive them in the future
- Series of Workshops and Seminars on IP and resources
- Financial Support (Prize Money, Funding Effort)
Final Competition

- Preliminary rounds for Technovate
- Final competition on April 28, 2015
- $8500 in Prizes

**Track specific prizes**

- 1st Place = $2,500
- 2nd Place = $1,000
- People's Choice Award = $500

The Winner(s) of the Technovate Prize will automatically be accepted to the Summer '15 Class of **Lean Launch Pad** at TTU.
TTU Maker Space: Innovation Discovery Learning Institute

- Goal: Create a culture of Innovation and Entrepreneurship at TTU
- University-wide Facility
- Led by Colleges of Engineering & Business
- Serve as a campus focal point for Innovation and Entrepreneurship programs and activities in all disciplines
- Support Eagle Works Competition
IDLI Space Located at TTU Volpe Library

- 3,000 ft²
- Fab. Space
- Team Space
- Multipurpose Space
- Conference Room
A Walk Through TTU Maker Space
IDLI Technology and Equipment

- Collaborative Technology (BYOD)
- CAD Workstations
- Fabrication Equipment
  - 3D Printers & 3D Scanner
  - Small CNC Router
  - Small Injection Molding Machine
  - Small Mill, Lathe, Drill Press, & Saw
  - Sewing Machine
  - Electronics Workbenches
  - Hand Tools
A Vision: Innovation and Techno-Entrepreneurship at TTU

- Innovative idea-concept
- Prototype
- Customer discovery
- Visualize final product
The TTU Pathways to Innovation Program (PIP) Team

- Joe Biernacki (ChE)
- Steve Canfield (ME-Team Leader)
- Vahid Motevalli (co-Lead)
- Mohan Rao (ME)
- Holly Stretz (ChE)
- Ken Hunter (BE)
- Omar Elkeelany (ECE)

Partners/contributors

- PIP University Innovation Fellows: Enis Cirak (CoE), Abigail Collins (CoE) and Jonathan Abbotoy (CoB)
- Jeff Brown (CEO of BizFoundry)
- College of Business (Ann Davis, Michael Aikins, …)
- Melissa Geist (College of Interdisciplinary Studies)
THANK YOU – QUESTIONS?

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