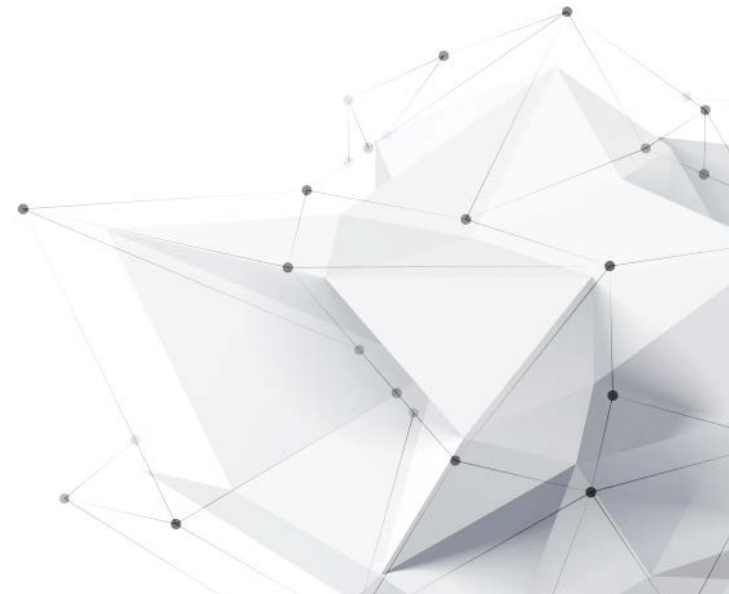


# Our Journey Into Learning Innovation and Competency-Based Education

**jeff evans, justin seipel, michael smith**  
Purdue Polytechnic Institute

**Polytechnic Summit**  
**June 6, 2017**

**PURDUE**  
POLYTECHNIC



# WHY INNOVATE LEARNING? WHY CBE?

- **Why Innovate?**

- Nature of work is changing – How to prepare graduates to be more adaptable
- 2013 Hart research study – “It takes more than a major”
- Criticism of the value of a college education (access, cost, etc.)
- Academia failing to respond to the wide range of external stakeholders

- **Why CBE?**

- Outcomes and assessment aligned with 21<sup>st</sup> century needs
- Transparency – learners and instructors know the outcomes
- Adjustable pace of learning
- Student Agency, Ownership of learning
  - Add program of study flexibility
  - Add faculty mentoring

# CONCEPTION, DESIGN & FIRST COHORT

- **2012-2013: Small faculty groups meet on disrupting higher (STEM) education**
  - **2013 - Spring-Summer: Purdue Move proposal/award for transforming the College of Technology**
- **2013 – Aug.: Faculty application process to create an education “incubator”**
- **2013 – Sept.-Dec.: Evening meetings facilitated by experienced education disrupter and leadership coach**
  - **Focus on Individual**
    - Vulnerability, Letting go of expertise to more effectively communicate across disciplinary boundaries and mindsets
- **2014 – Jan.: First meetings to design a program**
- **2014 – Feb.-July: (Very) Early design of learning experiences**
  - Seminar
  - Design Studio
- **2014 – Aug. 25: First cohort of 33 students enter experimental learning experiences**
- **2014 – Sept. Incubator wins President's award for design of CBE program**
  - Tentatively titled *"Transdisciplinary Studies"*

# KEY TAKEAWAYS

- **Disruption is Hard**
  - **Systemic inertia**
    - Institutional value and reward system
    - Values (STEM vs. Humanities)
  - **Faculty Experts**
    - Biases thinking and placement of values
    - Convergence in thinking is challenging
- **Err on the side of Observation (Monitor the disruption)**
  - Both learning experiences monitored (faculty and students)
  - Necessitated quick adjustments in real time
- **Ability to handle independence**
  - Student and faculty readiness and responsiveness
- **Disruption is HARD**

# APPROVAL PROCESS AND CBE LANDSCAPE

- **December 10, 2014: College of Technology approves CBE degree program**
- **January 2015: Application to C-BEN approved**
  - Attended first convening March 3-5 2015
- **March, 2015: Higher Learning Commission (HLC) stops accepting substantive change for CBE programs retroactive to January 1, 2015**
- **April 10, 2015: Purdue Board of Trustees approves "Transdisciplinary Studies in Technology" degree**
  - 1st undergraduate CBE program at major university
- **May 2015: ICHE request – OK from NCAA**
- **June 2, 2015: Council of Regional Accrediting Commissions (C-RAC) announcement of common framework for CBE programs**
- **June 11, 2015: ICHE approves degree**
  - Letter received June 12, 2015
- **August 31, 2015: HLC begins accepting substantive change approval requests for CBE programs**
- **September 15, 2015: Substantive change approval requested**
- **September 30, 2015: US Office of Inspector General issues final report critical of HLC policies and procedures for approving CBE programs**
- **March 22, 2016 HLC approves Transdisciplinary CBE program**
  - Program appears on "Common App" for fall 2017 new beginners

# KEY TAKEAWAYS

- **Disruption is Hard**
  - **Systemic inertia**
    - Institutional
    - Regional (HLC)
    - National (C-RAC, DOEEd)
- **Learn the Landscape of Higher Education**
  - Internally (College, University)
  - Externally (Approvers, Accreditors, Policy Makers in [your country])
- **Patience**
  - Institutional, regional, federal Inertia
  - Approvals do not generally happen overnight
- **Disruption is HARD**

# TESTING AND GROWING THE PROGRAM

- **March 2016 – Implementing Lessons Learned and Preparing for Fall 2017 Cohort**
  - **Revisiting Competency Language**
  - **Creating Assessment Framework**
  - **Creating Instructional Scaffolding**
  - **Recruiting New Students**

# LESSONS LEARNED

- **Encourage innovation in a protected environment**
- **“Don’t let the perfect be the enemy of the good” – Voltaire**
- **Demonstrate viability but also maintain long-term potential**
- **Tolerate Risk**
- **Expect Resistance**
- **Know when to Compromise**
- **Choose decision-making and organizational practices wisely**
- **Effective Communication through a variety of Channels is Critical**
- **Perseverance and Grit are Essential**
- **Know how things get done at your institution**



# MOVING FORWARD

- **New TST majors and collaborations across schools**
- **National standards being developed for CBE**
- **Open ended future?**

## polytechnic institute

jeffrey j. evans, justin seipel, michael smith

Undergraduate programs & polytechnic educational research & development

[jje@purdue.edu](mailto:jje@purdue.edu), [jseipel@purdue.edu](mailto:jseipel@purdue.edu), [smith859@purdue.edu](mailto:smith859@purdue.edu)

## Purdue Polytechnic Institute

[polytechnic.purdue.edu/incubator](http://polytechnic.purdue.edu/incubator)



**PURDUE**  
POLYTECHNIC

