Purdue Moves Update: Transformation of the Purdue Polytechnic Institute

Gary Bertoline
Dean, Purdue Polytechnic Institute

Update to the Board of Trustees
April 8, 2016
FRAMING THE POLYTECHNIC TRANSFORMATION

SIX AREAS OF TRANSFORMATION

- Curriculum Innovation
- Teaching & Learning Innovation
- Use-Inspired Research
- Faculty Professional Development
- K-12 STEM Education and URM Opportunity
- Modernization of Learning Spaces

UPDATE: Competency-based Transdisciplinary Studies in Technology Degree
UPDATE: Progress across college; special update on School of Construction Management
UPDATE: Purdue Polytechnic Indianapolis High School
UPDATE: Space Requirements and Facilities Master Plan
UPDATE: Competency-based Transdisciplinary Studies in Technology Degree

BT 4/8/2016
SUMMARY OF KEY MILESTONES

  - Board of Trustee approval – May 2015; ICHE approval – June 2015
- For Fall 2016
  - Tune competency assessments and obtain employer feedback
  - Continuing delivery to Fall 2014 pilot/experimental cohort
- For Fall 2017
  - Major marketing and recruiting campaign starts May 1, 2016
  - ePortfolio into academic record
- Launching point for college’s other degrees and majors

COMPETENCIES

- Apply systems thinking
- Communicate effectively
- Innovate and create
- Apply design thinking
- Apply disciplinary knowledge
- Socially interact on a team
- Apply ethical reasoning
- Envision and execute independently
LEARNING ENVIRONMENT TRANSFORMATION

STEADY PROGRESS IN LAST 18 MONTHS

- Areas in which we have always excelled, but are expanding
  - Theory-based Applied Learning
  - Team Project-Based Learning

- Areas that are well proven & now spreading across the college
  - Industry-driven Senior Capstone Projects
  - Required Internships
  - Globalization/Cultural Immersions

- Areas in which we are setting ourselves apart
  - Modernized “Active Learning” Teaching Methods
  - Integrated Humanities Studies
  - Faculty-to-Student Mentoring
  - Competency Credentialing

- Special update – School of Construction Management Tech
  - Bold curricular framework for Fall 2016 start
CONSTRUCTION MGT TRANSFORMED CURRICULUM

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8/2016
**FACILITY**

- Site selection in process – 3 possible facilities:
  - 2 IPS buildings
  - 1 non-school school building
- Target decision end of April
- All facilities located in high-need areas of the east side of downtown
- Working with IPS for an “Innovation Network School” partnership
  - Will enable recruiting access of target students and potentially lower investment
Polytechnic does not have needed space to deliver all parts of transformation – among most “space-squeezed” of colleges
- Key curricula & pedagogical elements of transformation require teaching lab space, student project space, active-learning classes
- Undergraduate enrollment programmed to increase 23%
- # of faculty programmed to increase 21%
- % of faculty performing research increasing each year
- # of graduate research assistants programmed to increase 34%
- Long-standing space shortage in Knoy Hall & Michael Golden Lab

- March 2015 Space Study quantifies college’s space shortages
- March 2016 Facilities Master Plan identifies solution
  - Polytechnic Applied Learning Building – $22M
  - Knoy Hall Expansion – $43M
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