Making Ecosystems: Talent, Innovation, and Place

The Maker Movement and Regional Innovation Ecosystems

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Overview

• University contributions to talent, innovation, and place
• Making and manufacturing
• Making and a broader “Solver Movement”
• Flipping the mission
• Examples from APLU’s Innovation and Economic Prosperity Universities
Research, Creative Works, Problem Solving, and Entrepreneurship

Cradle-to-Grave Human Capital and Talent Development

Community-Connected Institutions and Stewardship for Vibrant Communities
Foundations for Strategy and Practice
Assessment Tools
New Metrics Field Guide
Economic Impact Guidelines

http://www.aplu.org/CICEPFramework
TALENT

Cradle-to-Grave Human Capital and Talent Development

INNOVATION

Research, Creative Works, Problem Solving, and Entrepreneurship

PLACE

Community-Connected Institutions and Stewardship for Vibrant Communities

Manufacturing
Making, Manufacturing, and Ecosystems

• Making inspires and attracts talent
• Making drives innovation
• Making sparks revitalization of place
• Example: Detroit, LIFT
  • Pathways to Jobs in Detroit
  • American Lightweight Materials Manufacturing Institute
  • Brightmoor Maker Space
Solvers

Makers
The Solver Movement

• Solvers are
  • adaptable, agile.
  • focused on scaling, impact.
  • found at all workforce levels—low- middle- high-skills.
  • needed across disciplines—STEM, humanities, social sciences.
  • creating benefit across the education and work value chain: inputs, processes, outputs, and outcomes.
  • required in teaching, managing, policy making.
Flipping the Mission

- LEARNING
- DISCOVERY

ENGAGEMENT
Flipping the Mission

ENGAGEMENT -> LEARNING

LEARNING

DISCOVERY
Examples

• Virginia Tech
  • Northern Virginia Center MakerLabClub
  • Part of overall efforts to grow a framework for entrepreneurship

• New Jersey Institute of Technology
  • (in development)
  • Developing STEM talent; innovation, invention and product realization

• Penn State
  • MakerCommons
  • Part of Invent Penn State economic development strategy focused on bringing ideas to market
Examples

• University of Louisville
  • FirstBuild
  • Partnership with GE, co-located UofL students and faculty with GE engineers, Local Motors designers; public access after hours

• Purdue University
  • PurdueFoundry and BoilerMaker Labs
  • Team, Capital, Prototype, Market, Customer; competitions and networking events; instructional and research support

• Texas Tech University
  • Rapid Prototyping at Research Park (R2P2)
  • Cross-disciplinary interaction; public workshops; engagement with local schools and Chamber of Commerce
Examples

• University of Maryland
  • Terrapin Works
  • Collection of digital manufacturing resources; adjacent location of two sites with Startup Shell, a student-run co-working space and incubator
Thank you!

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• CICEP Economic Engagement Framework
  http://www.aplu.org/CICEPFramework

• Innovation and Economic Prosperity Universities
  http://www.aplu.org/IEPUniversities