

Making Ecosystems: Talent, Innovation, and Place

The Maker Movement and Regional Innovation Ecosystems

NAS GUIRR Webinar
Wednesday, April 27, 2016

Jim Woodell

Vice President for Economic Development and Community Engagement

Association of Public and Land-grant Universities

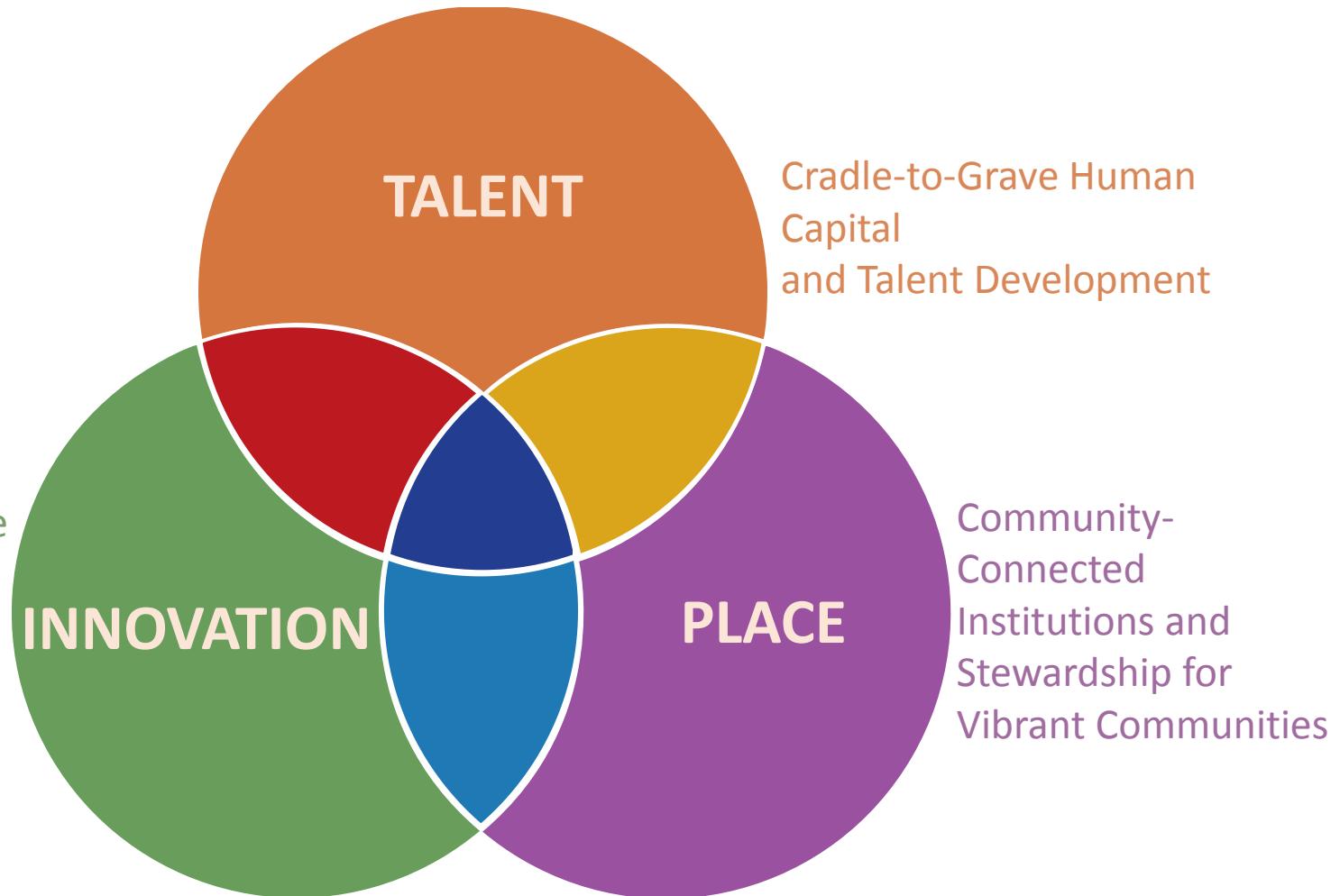


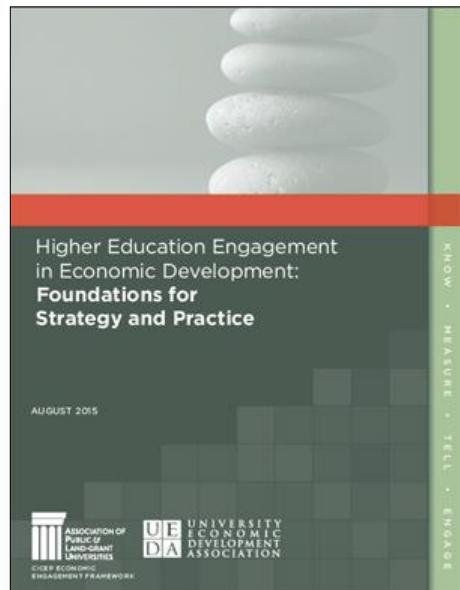
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Overview

- 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

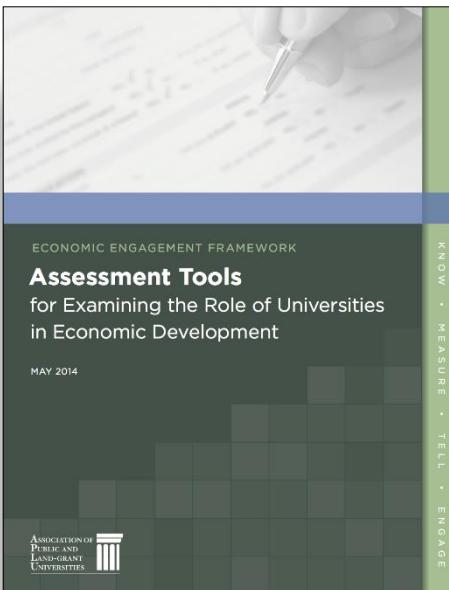






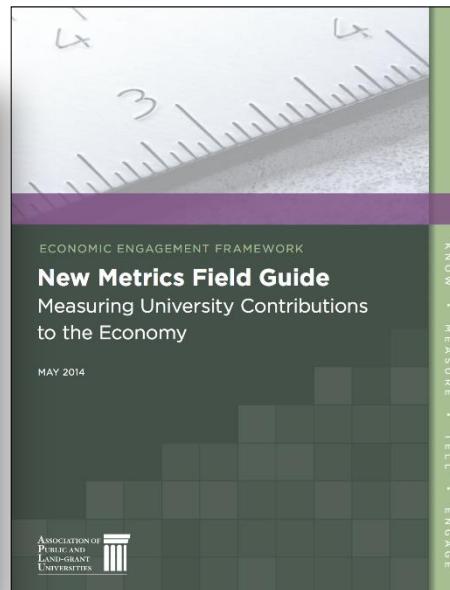
Higher Education Engagement in Economic Development: **Foundations for Strategy and Practice**

AUGUST 2015



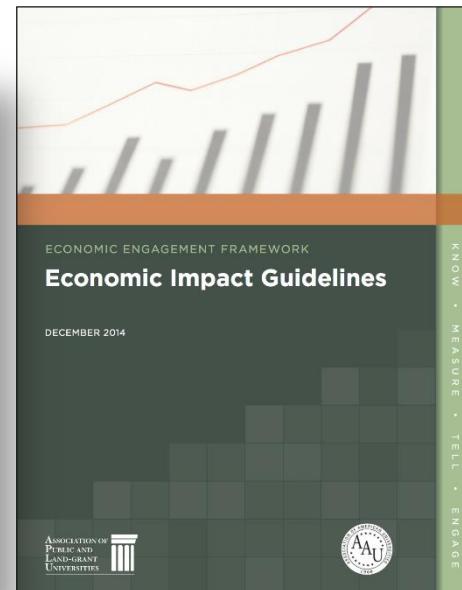
ECONOMIC ENGAGEMENT FRAMEWORK **Assessment Tools** for Examining the Role of Universities in Economic Development

MAY 2014



ECONOMIC ENGAGEMENT FRAMEWORK **New Metrics Field Guide** Measuring University Contributions to the Economy

MAY 2014



ECONOMIC ENGAGEMENT FRAMEWORK **Economic Impact Guidelines**

DECEMBER 2014

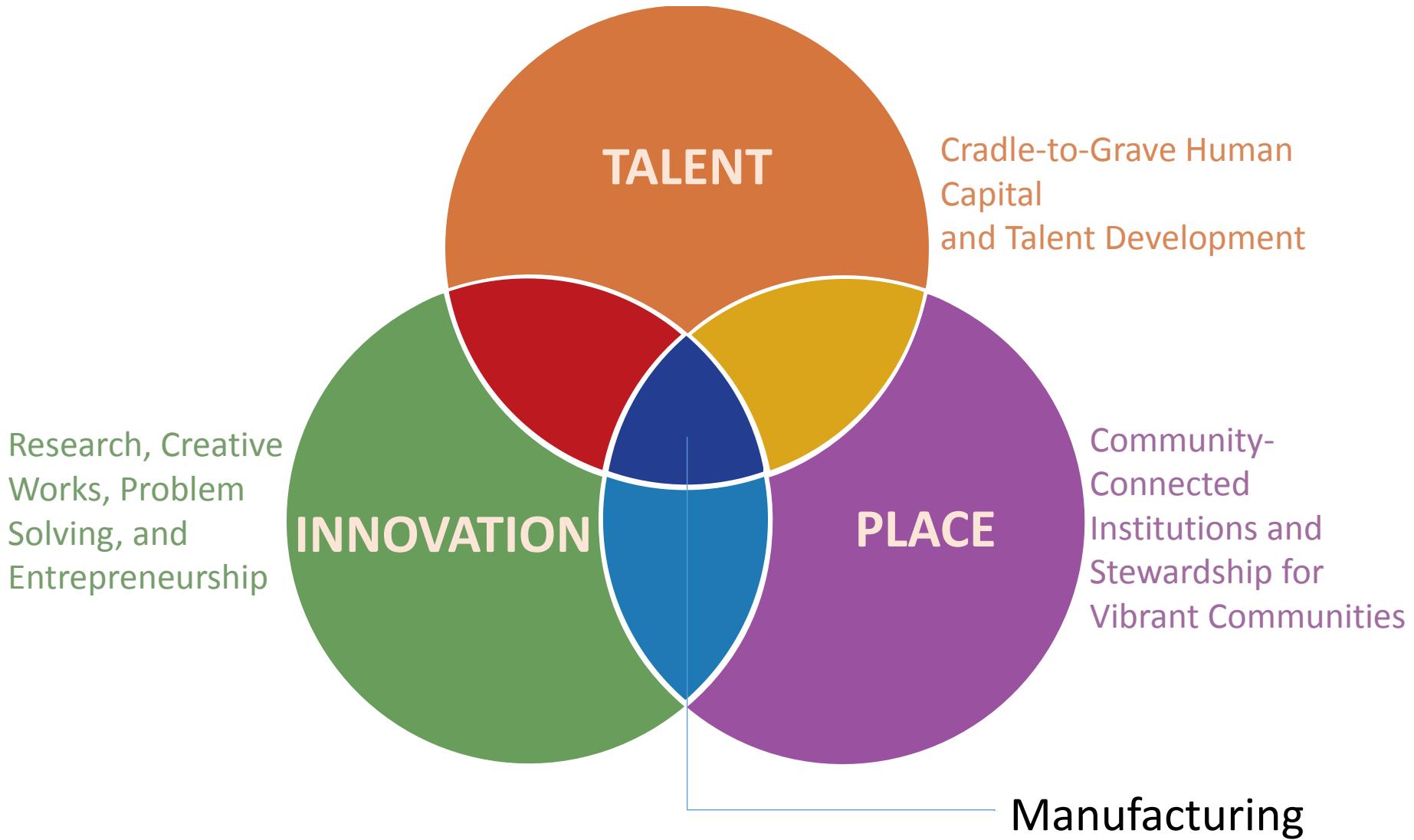
Foundations for Strategy and Practice

Assessment Tools

New Metrics Field Guide

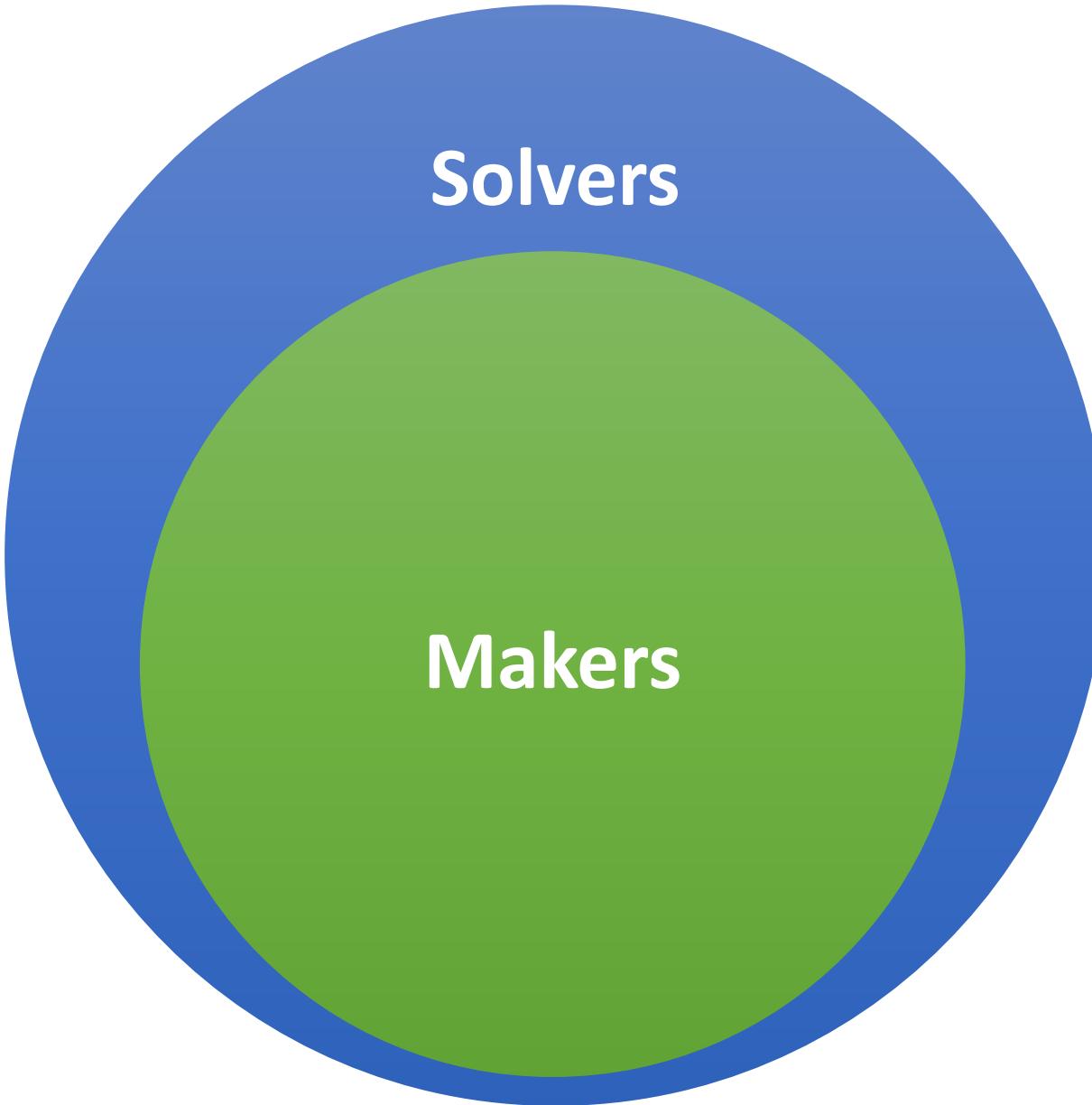
Economic Impact Guidelines

<http://www.aplu.org/CICEPFramework>



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



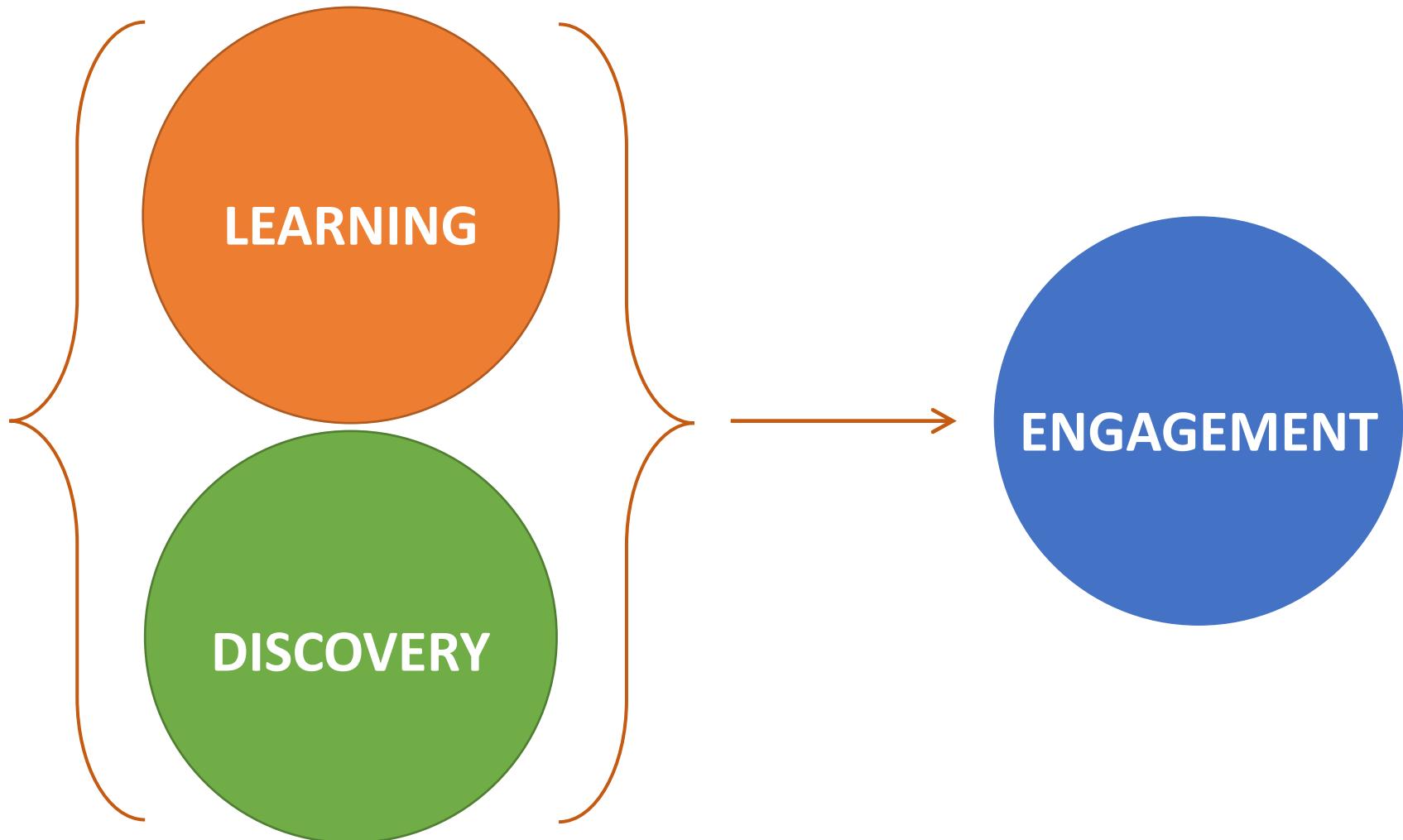
Solvers

Makers

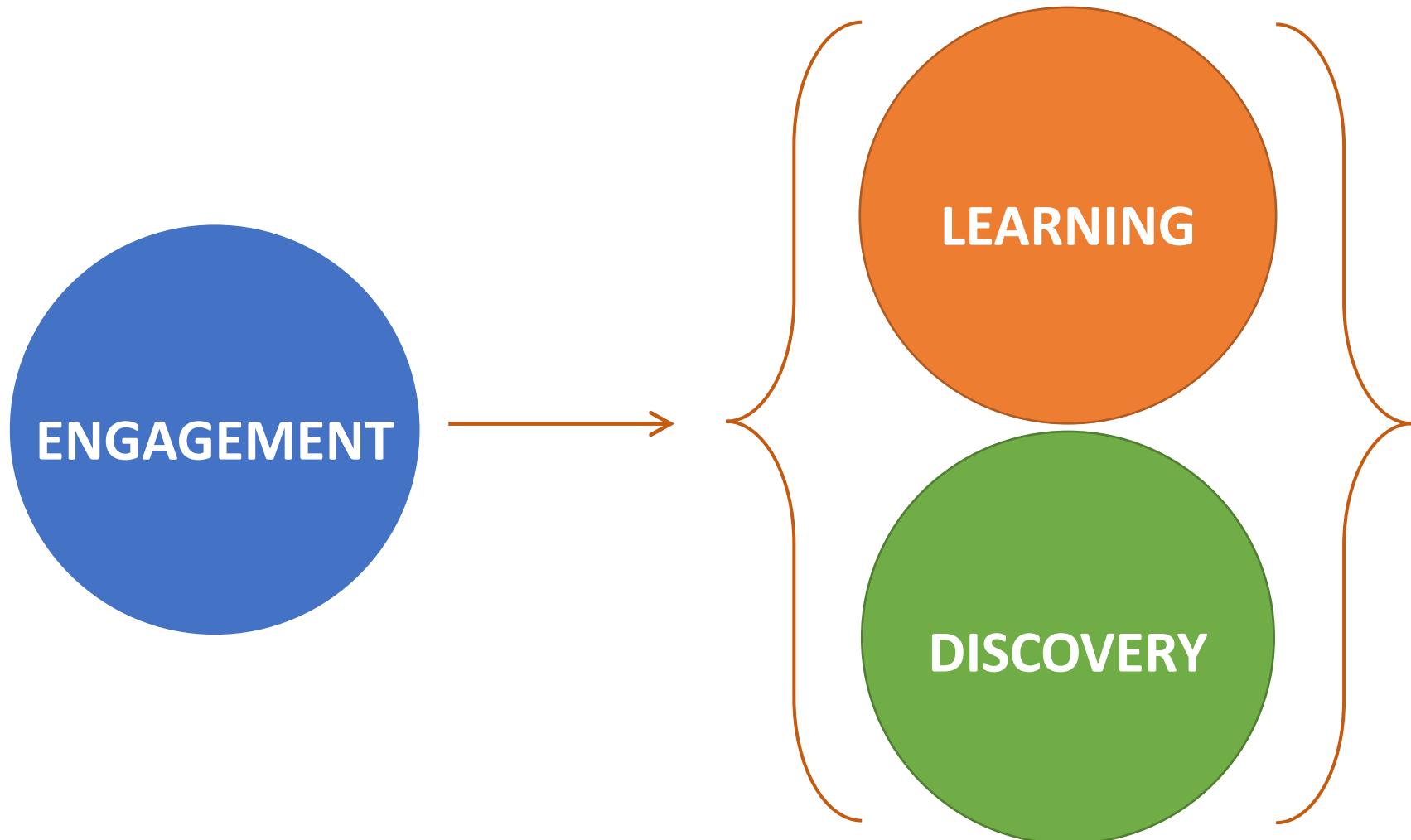
The Solver Movement

- 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



Flipping the Mission





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

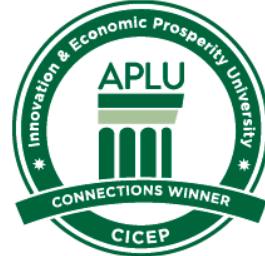
Examples

- **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!

- Jim Woodell
Vice President for Economic Development and
Community Engagement, Association of Public and
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jwoodell@aplu.org
- CICEP Economic Engagement Framework
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