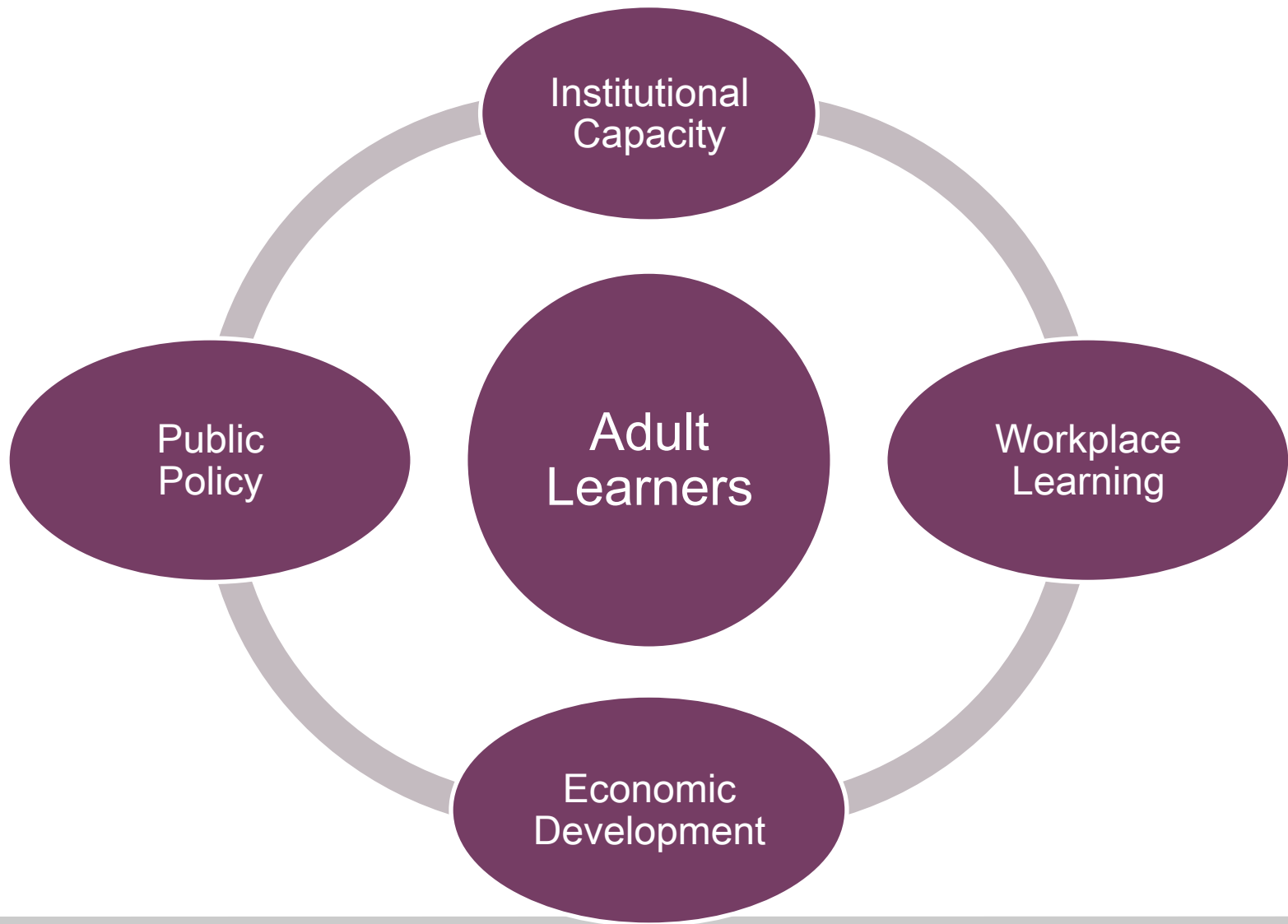# Workforce Development Tools
for
Changing Communities

Joel Simon, VP

The Council for

Adult and Experiential Learning (CAEL)

CAEL Vision: Meaningful Learning, Credentials and Work for all adults

CAEL's Workforce & Economic Development

Aligning workforce and education with economic development
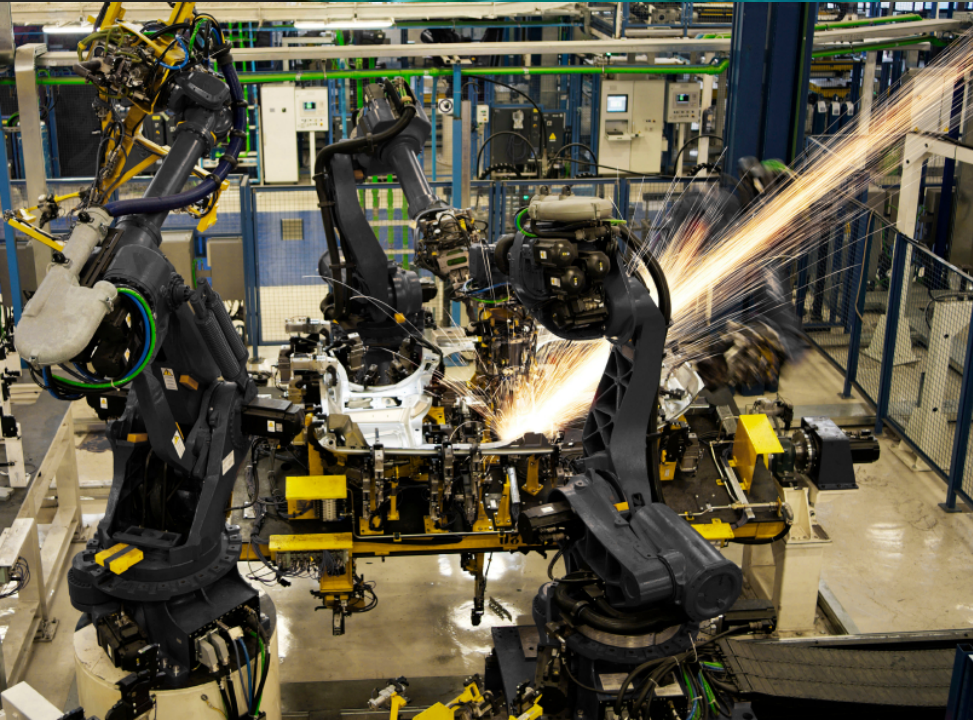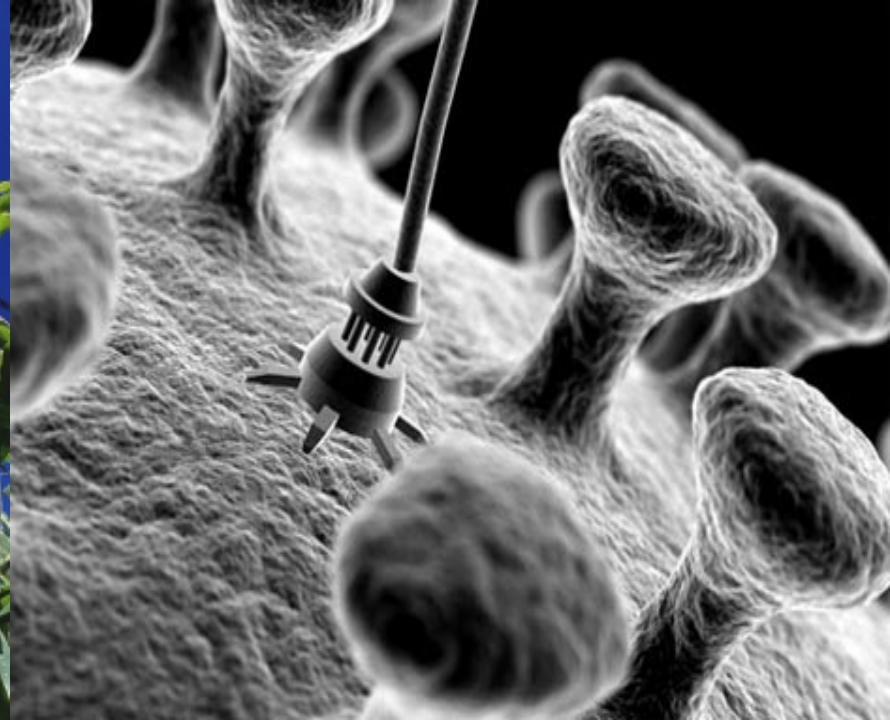
Collaboration among regional stakeholders

Leveraging the value of learning and the learning ecosystem to support and spur economic growth
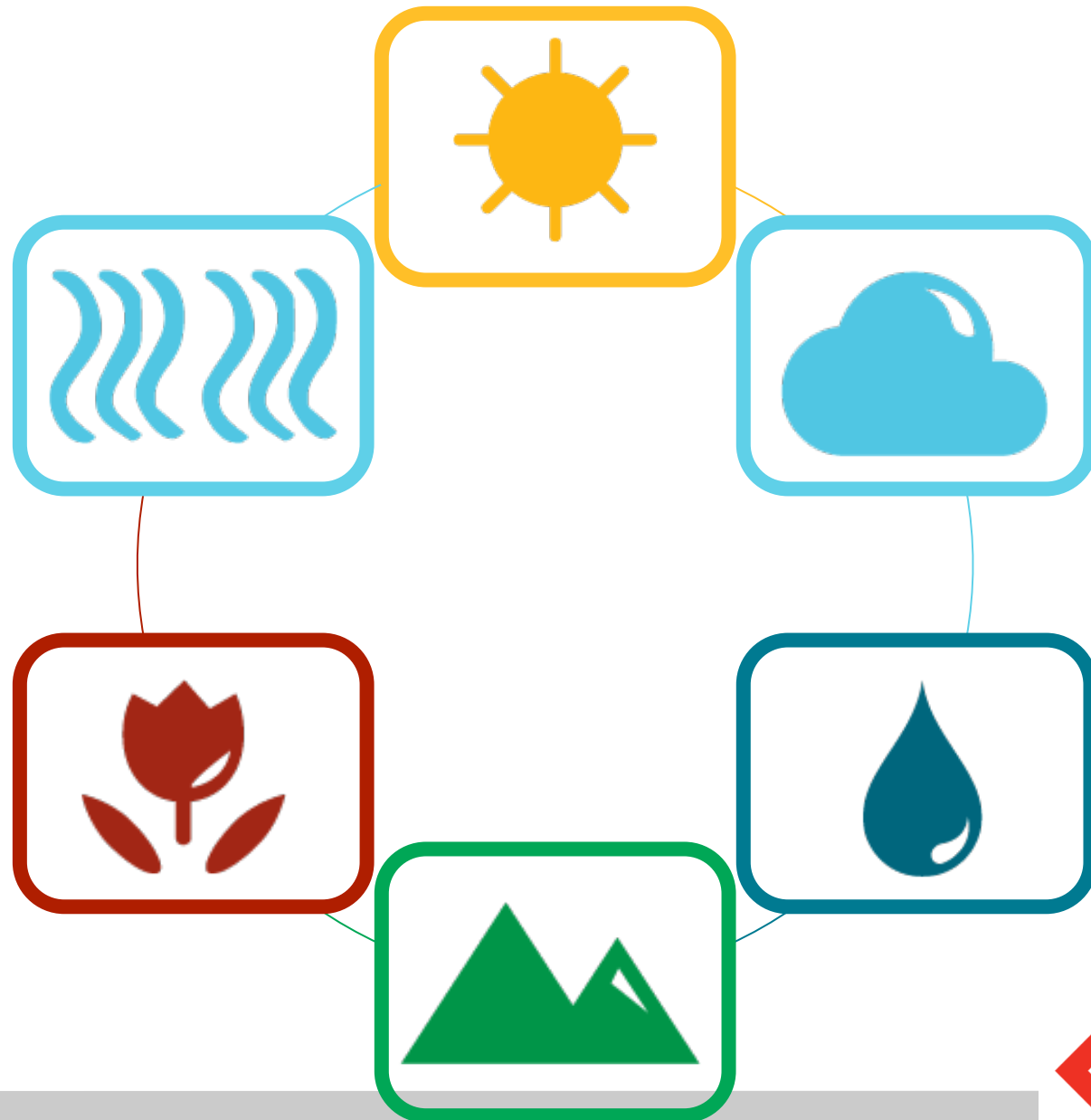
Illinois was…..

SPLITTING
BACKBONE
SWIFT & COMPANY

265 Splitting backbones and final inspection — hogs ready for

Illinois is...

Healthy Education Ecosystem Framework

Education Ecosystem Framework

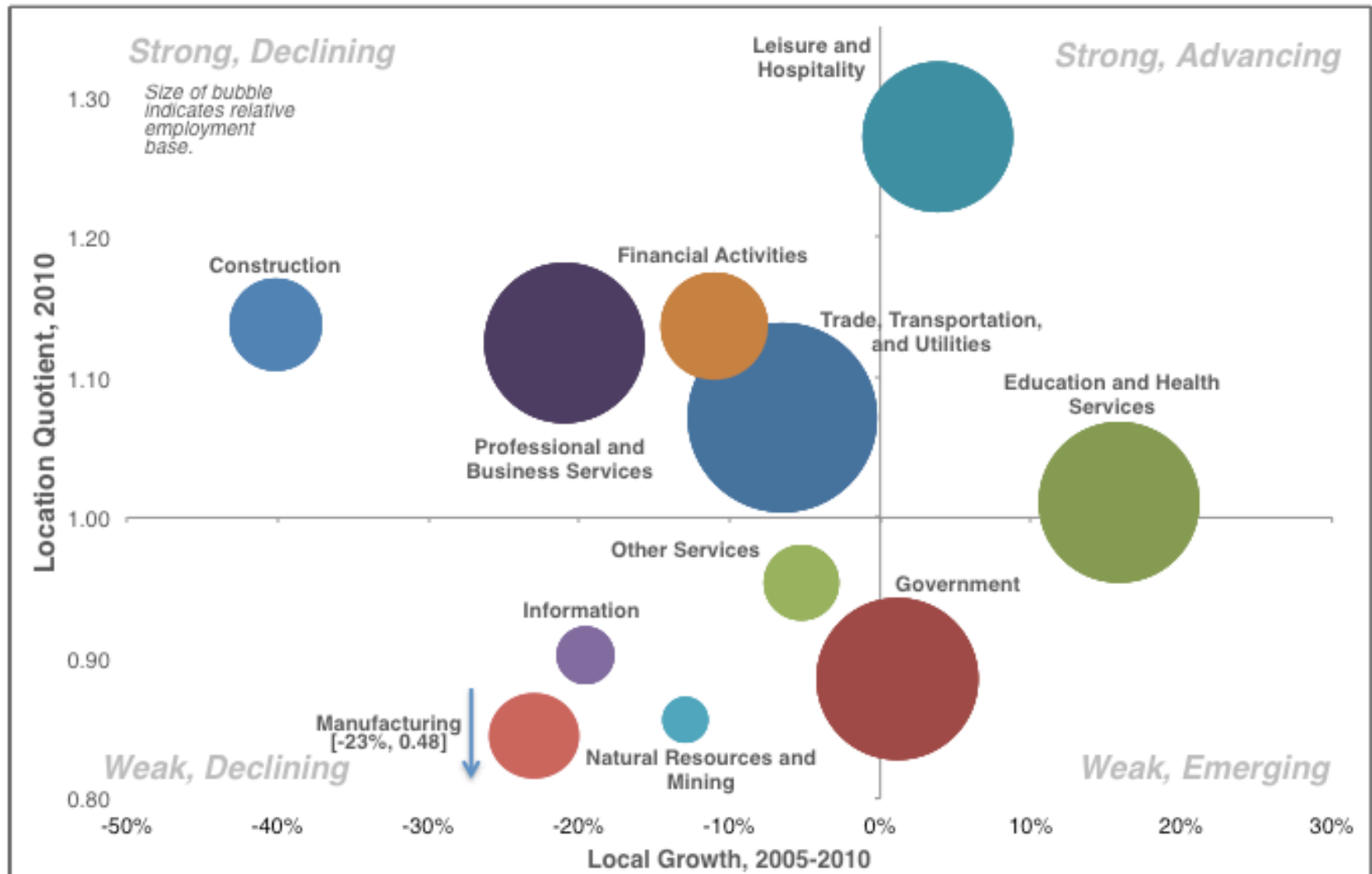| THE ENERGY SOURCE	THE CLOUDS GATHER	THE RAIN DANCE
What's driving job creation?	Are employers engaged and drawn to your community?	Are workers aware of career opportunities?
THE GROUNDWATER TEST	THE DIVERSE PLANT LIFE	THE TRIP BACK TO THE CLOUDS
Do local education options meet the range of needs?	Do education & training programs engage all learners?	Are programs building resourceful and resilient workers?

What's driving job creation?

Industry Targeting
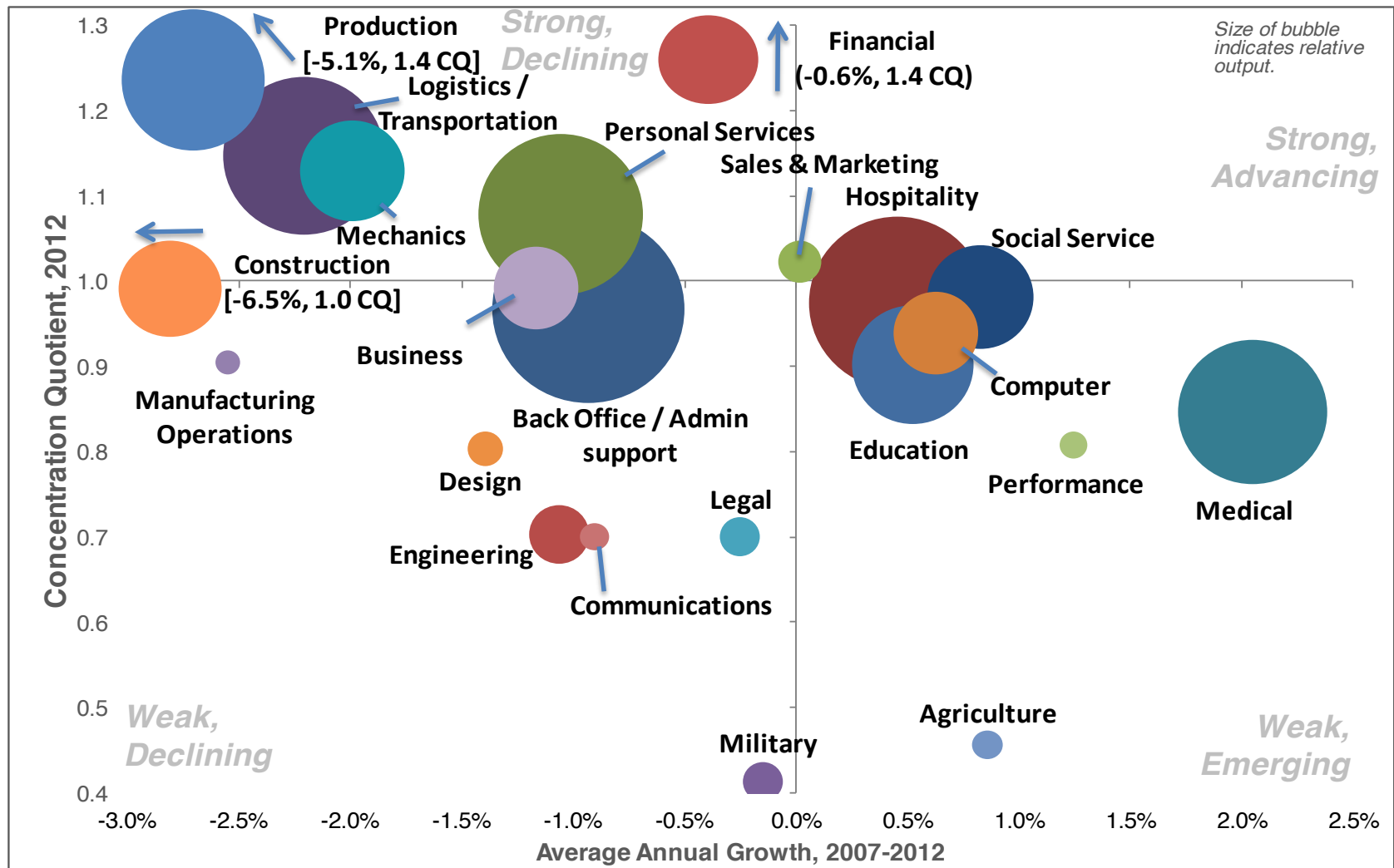

Major Industries: Florida

Occupational Targeting

Occupational Clusters: Greater Charlotte Region

Size of bubble indicates relative output.

Strong, Declining

Strong, Advancing

Weak, Declining

Weak, Emerging

Production [-5.1%, 1.4 CQ]

Logistics / Transportation

Financial (-0.6%, 1.4 CQ)

Personal Services

Sales & Marketing

Hospitality

Social Service

Mechanics

Construction [-6.5%, 1.0 CQ]

Business

Computer

Manufacturing Operations

Back Office / Admin support

Education

Medical

Design

Performance

Legal

Engineering

Communications

Agriculture

Military

Concentration Quotient, 2012

1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4

Average Annual Growth, 2007-2012

-3.0% -2.5% -2.0% -1.5% -1.0% -0.5% 0.0% 0.5% 1.0% 1.5% 2.0% 2.5%

Source: Avalanche Consulting using data EMSI

What kinds of learning opportunities are available?

Learning Ecosystem Players

Private University

For Profit Institution

Site Selector

Employers

Public University

Community College

Workforce Investment Board

Economic Development Organization

Philanthropy

Elected Officials
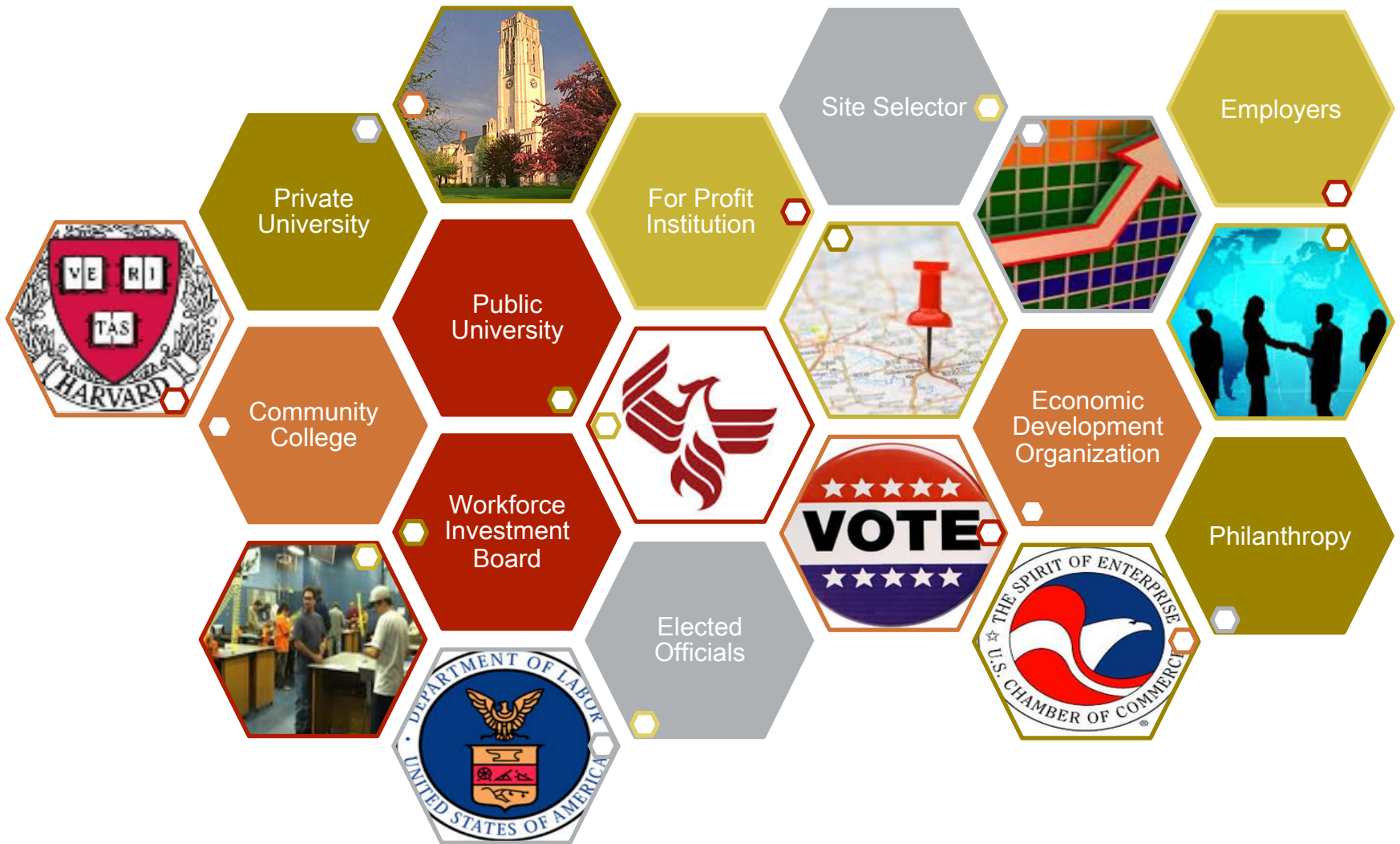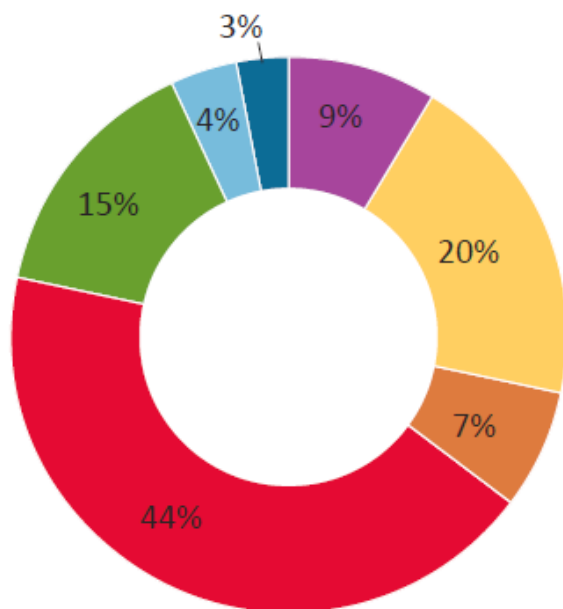
Information Technology

Credentials Available by Type

- Certificate — 29
- Associate Degree — 67, including 9 online**
- Minor — 24
- Bachelor's Degree — 149, including 15 online**
- Master's Degree — 50, including 4 online*
- Doctorate — 12, including 1 online**
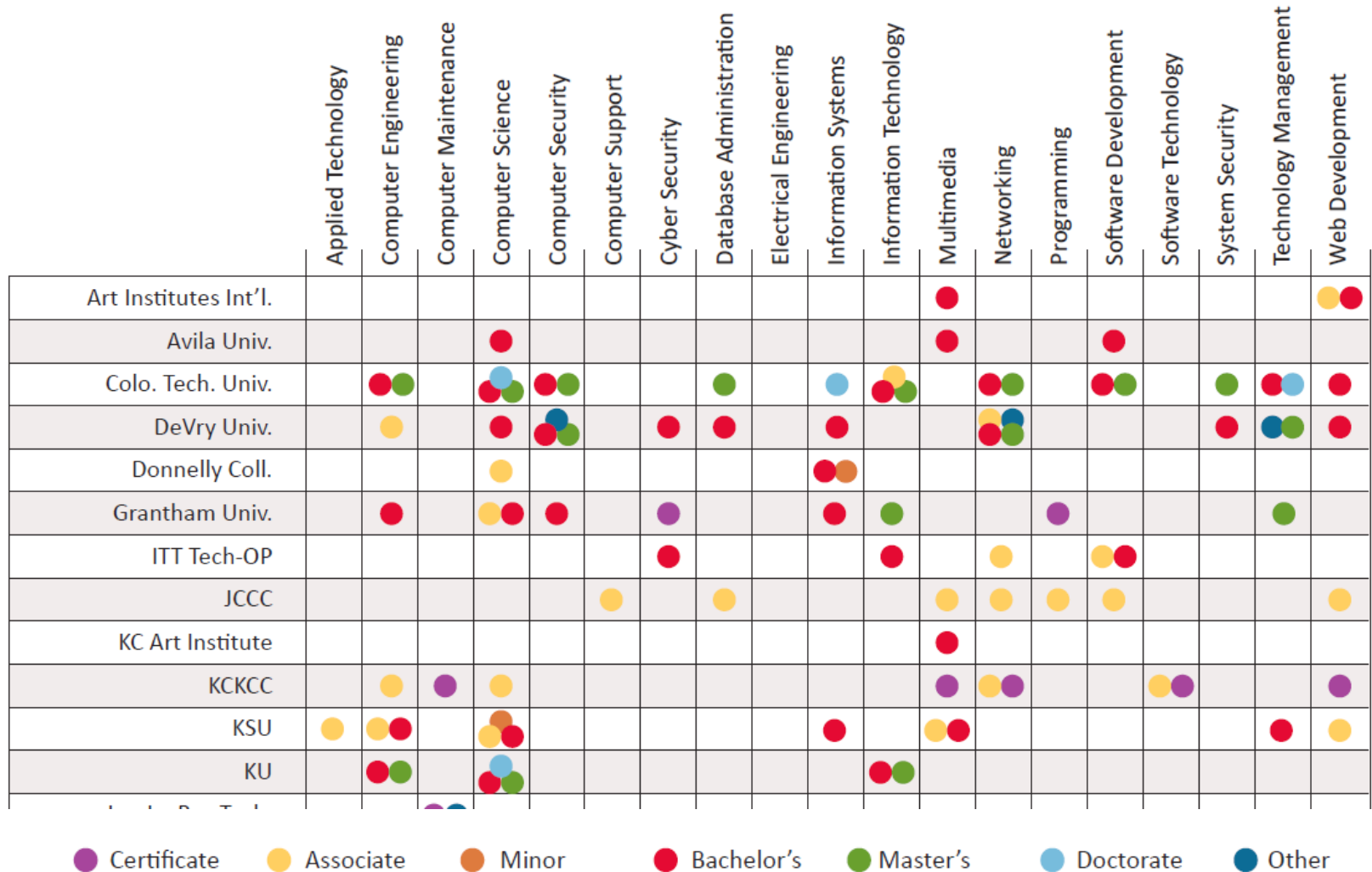- Other* — 10
- **TOTAL — 341**

* Other includes graduate certificate, short-term training, and high school/postsecondary training

** All online credentials are at for-profit institutions and are included in that row in the table below

Education Assets/Strengths

Information Technology Programs by Institution

	Applied Technology	Computer Engineering	Computer Maintenance	Computer Science	Computer Security	Computer Support	Cyber Security	Database Administration	Electrical Engineering	Information Systems	Information Technology	Multimedia	Networking	Programming	Software Development	Software Technology	System Security	Technology Management	Web Development
Art Institutes Int'l.												Bachelor's							Associate, Bachelor's
Avila Univ.				Bachelor's								Bachelor's			Bachelor's				
Colo. Tech. Univ.		Bachelor's, Master's		Doctorate, Bachelor's, Master's	Bachelor's, Master's			Master's		Doctorate	Associate, Bachelor's, Master's		Bachelor's, Master's		Bachelor's, Master's		Master's	Bachelor's, Doctorate	Bachelor's
DeVry Univ.		Associate		Bachelor's	Other, Bachelor's, Master's		Bachelor's	Bachelor's		Bachelor's			Associate, Other, Bachelor's, Master's				Bachelor's	Other, Bachelor's, Master's	Bachelor's
Donnelly Coll.				Associate						Bachelor's, Minor									
Grantham Univ.		Bachelor's		Associate, Bachelor's	Bachelor's		Certificate			Bachelor's	Master's			Certificate				Master's	
ITT Tech-OP							Bachelor's				Bachelor's		Associate		Associate, Bachelor's				
JCCC							Associate	Associate					Associate	Associate	Associate				Associate
KC Art Institute												Bachelor's							
KCKCC		Associate	Certificate	Associate								Certificate	Certificate, Bachelor's			Associate, Certificate			Certificate
KSU	Associate	Associate, Bachelor's		Associate, Minor, Bachelor's						Bachelor's			Associate, Bachelor's					Bachelor's	Associate
KU		Bachelor's, Master's		Doctorate, Bachelor's, Master's							Bachelor's, Master's								

Legend: ● Certificate ● Associate ● Minor ● Bachelor's ● Master's ● Doctorate ● Other

How Aware Are Your Workers of Opportunities for Learning and Work?
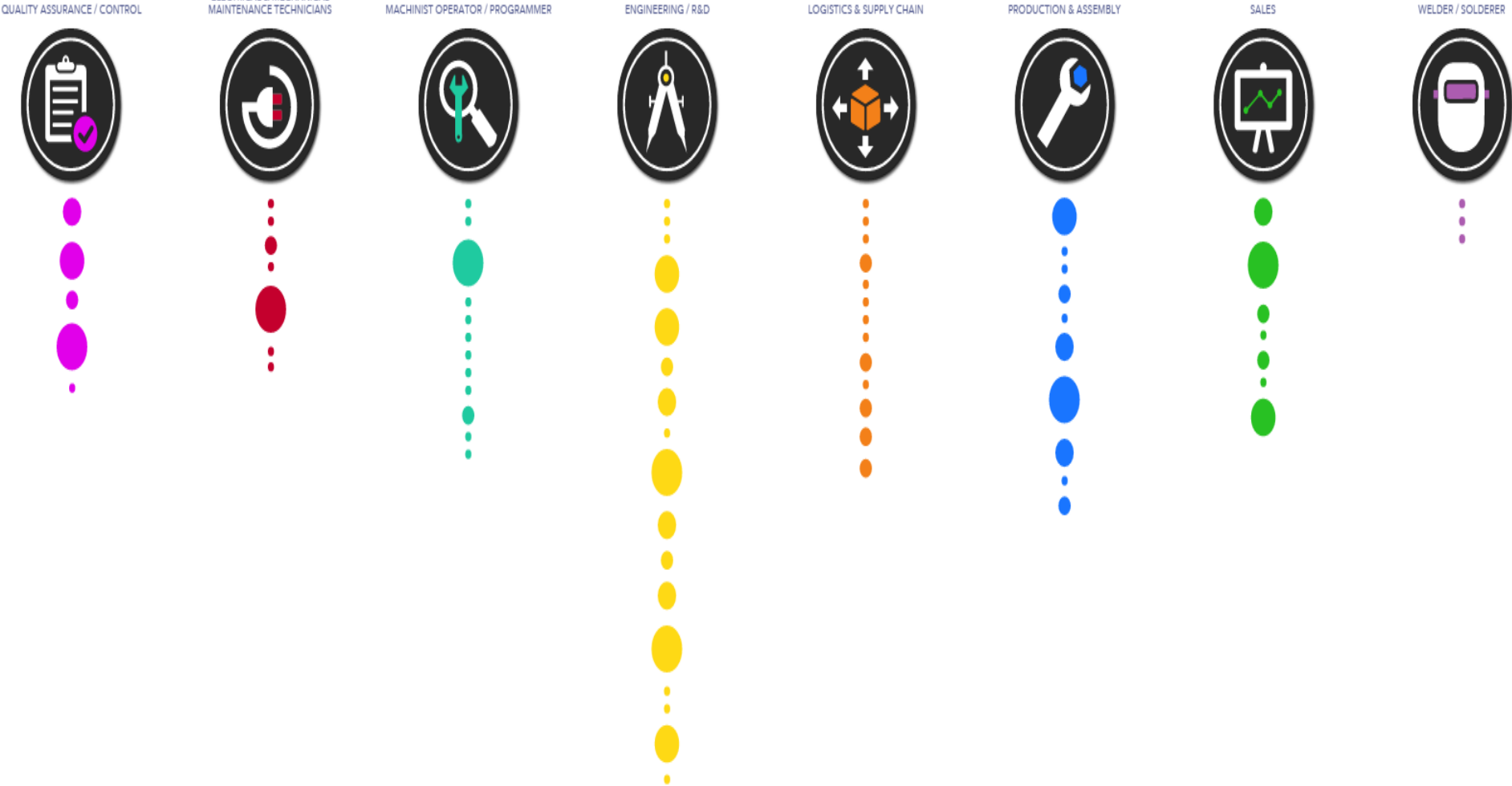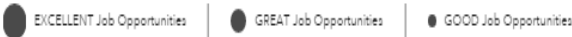
JOB TYPES IN ADVANCED MANUFACTURING

Choose a Job Type or Popular Career Path to learn more

Size of circle indicates current number of job opportunities within that job type

- EXCELLENT Job Opportunities
- GREAT Job Opportunities
- GOOD Job Opportunities

| QUALITY ASSURANCE / CONTROL | ELECTRICAL & MECHANICAL MAINTENANCE TECHNICIANS | MACHINIST OPERATOR / PROGRAMMER | ENGINEERING / R&D | LOGISTICS & SUPPLY CHAIN | PRODUCTION & ASSEMBLY | SALES | WELDER / SOLDERER |

INDUSTRIAL DESIGNER

Click on a job or new category to learn more.

Front Line Supervisor

Project Engineer

Engineering Manager

Director of Quality Assurance

Production Technician

Quality Engineer

Mechanical Engineer

Product Engineer

Project Manager

Industrial Engineer

Process Engineer

Applications Engineer

Validation Engineer

Lean Lead

Product Manager

Marketing Manager

Quality Assurance Specialist

Industrial Designer

ENGINEERING / R&D

BACK TO THE FULL INDUSTRY MAP

Quality Assurance / Control	Logistics & Supply Chain
Electrical & Mechanical Maintenance Technicians	Production & Assembly
Machinist Operator / Programmer	Sales
Engineering / R&D	Welder / Solderer

- - - - - - - - - -
Career paths across job types

——————
Career paths within job type

Are we leveraging the full range of talent in the community?

Are we leveraging the full range of talent in the community?

Are programs delivered in ways that maximize learning opportunities?

Are we acknowledging that learning occurs both formally and informally?

How do postsecondary programs relate to both short- and long-term economic and workforce needs?

Are we proactively engaging adult and non-traditional learners?

Adult Learning Focused Institutions (ALFI)

- Outreach

- Life and Career Planning

- Financing

- Assessment of Learning Outcomes

- Teaching/Learning Process

- Student Support

- Technology

- Strategic Partnerships

- Transitions

Example: ALFI across Eastern Connecticut Institutions

Institution	Outreach	Life, Career Planning	Financing	Assessment of Learning Outcomes	Teaching/Learning Process	Student Support Systems	Technology	Strategic Partnerships	Trainsitions
Anna Maria College	Green	Red	Green	Green	Green	Green	Green	Red	Green
Assumption College	Green	Green	Green	Green	Green	Yellow	Green	Gray	Green
Bryant College	Green	Yellow	Green	Yellow	Gray	Yellow	Green	Gray	Green
Charter Oak College	Green	Yellow	Green	Green	Gray	Green	Green	Green	Green
Clark University	Green	Gray	Green	Green	Green	Green	Red	Gray	Green
Connecticut College	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Green
Eastern CT State Univ	Yellow	Green	Green	Green	Yellow	Green	Yellow	Green	Green
Fitchburg State Univ	Green	Yellow	Red	Yellow	Green	Green	Green	Green	Green
Mt Wachusett Community College	Green	Yellow	Green	Green	Green	Yellow	Green	Green	Green
Nichols College	Green	Green	Green	Green	Green	Green	Green	Green	Green
Quinebaug Valley Community College	Green	Yellow	Green	Green	Green	Green	Green	Green	Green

Resilience

What are Skills building blocks?

http://www.careeronestop.org/competencymodel/

What does it add up to?
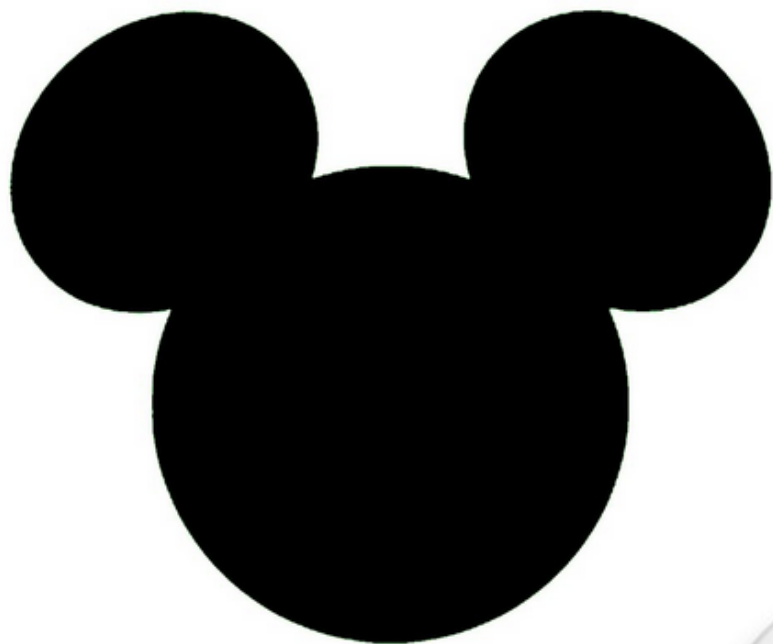

BRAIN CELLS

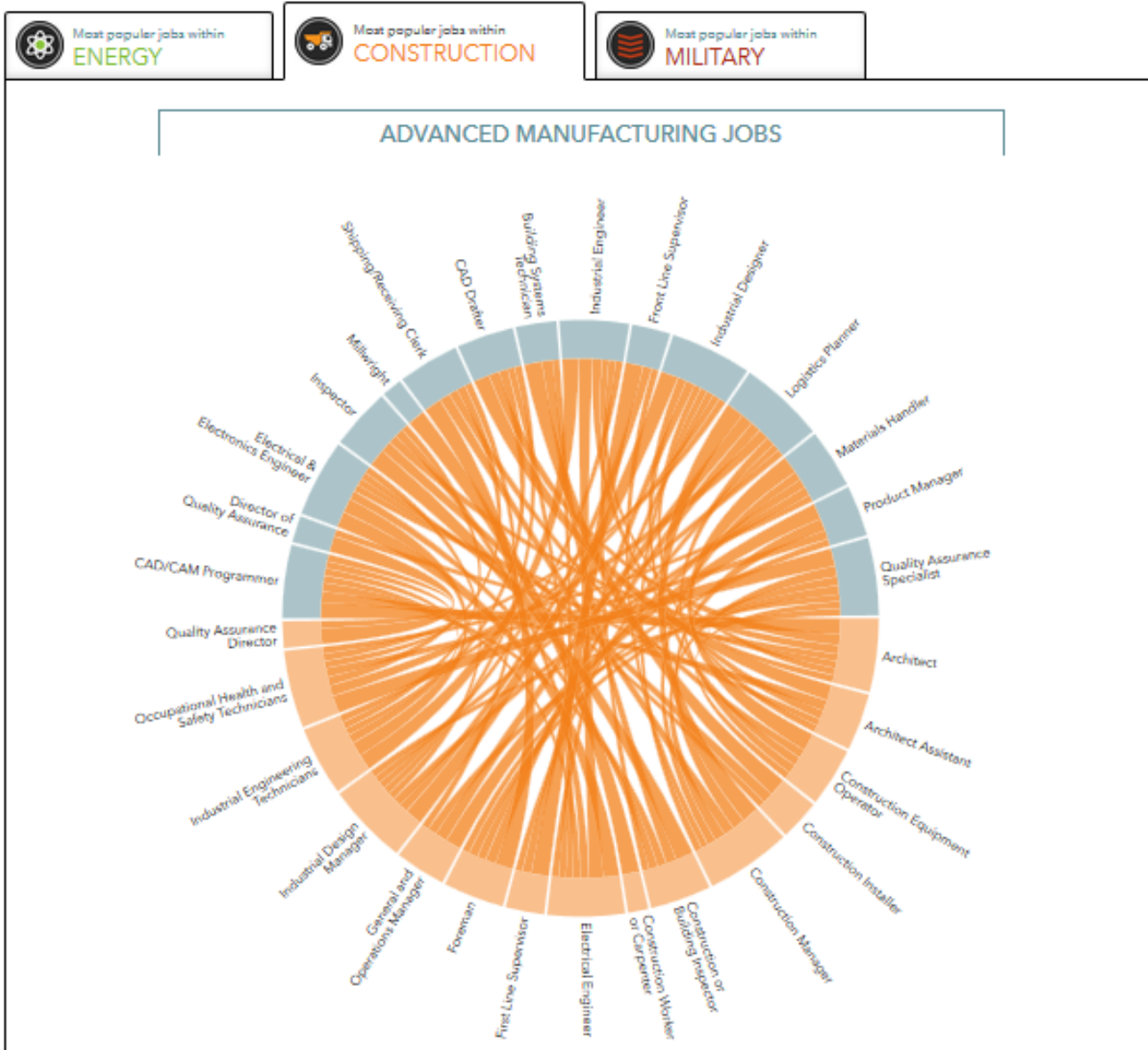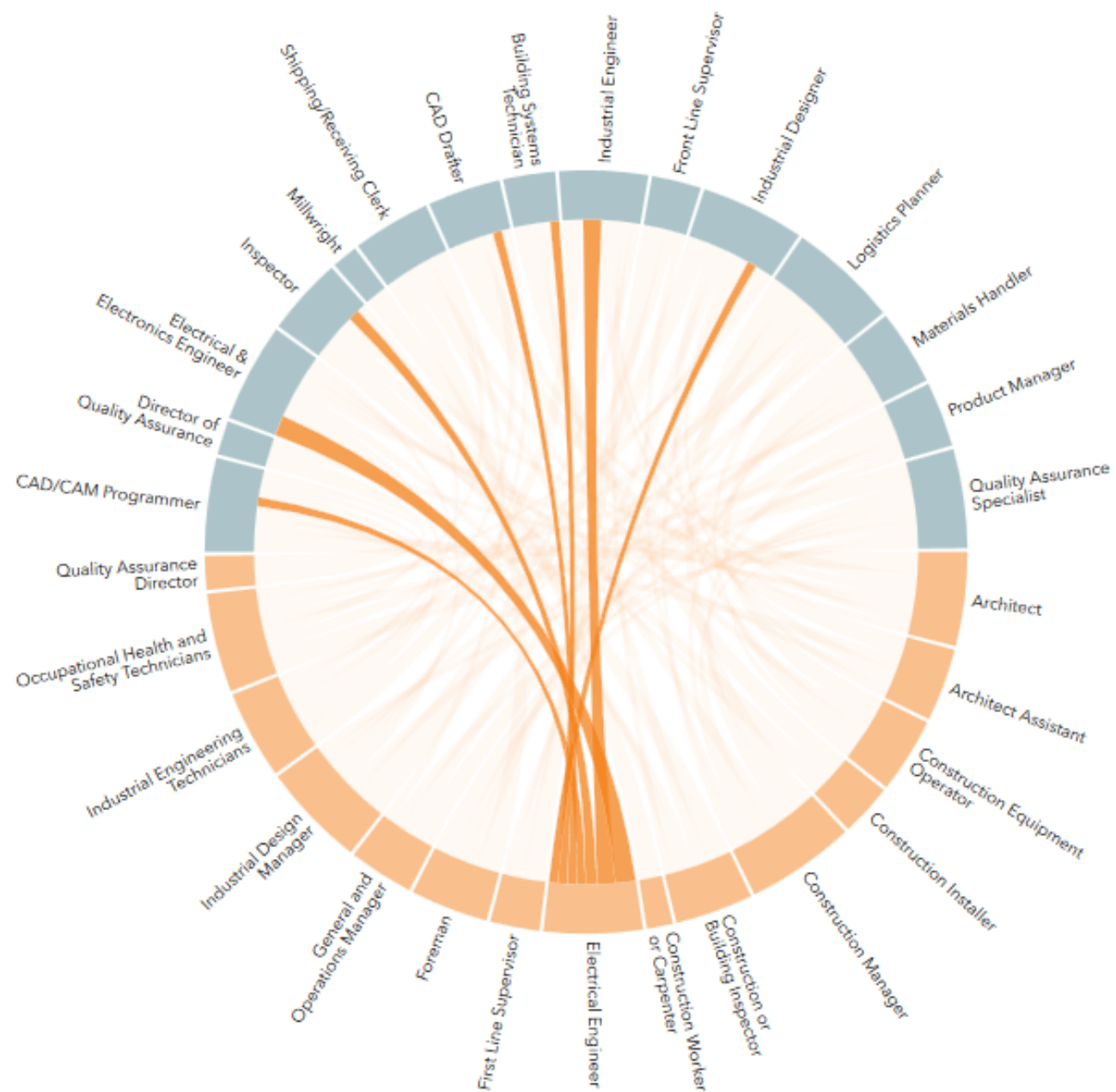HEART MUSCLE CELLS

FAT CELLS

RED BLOOD CELLS

NERVE CELLS
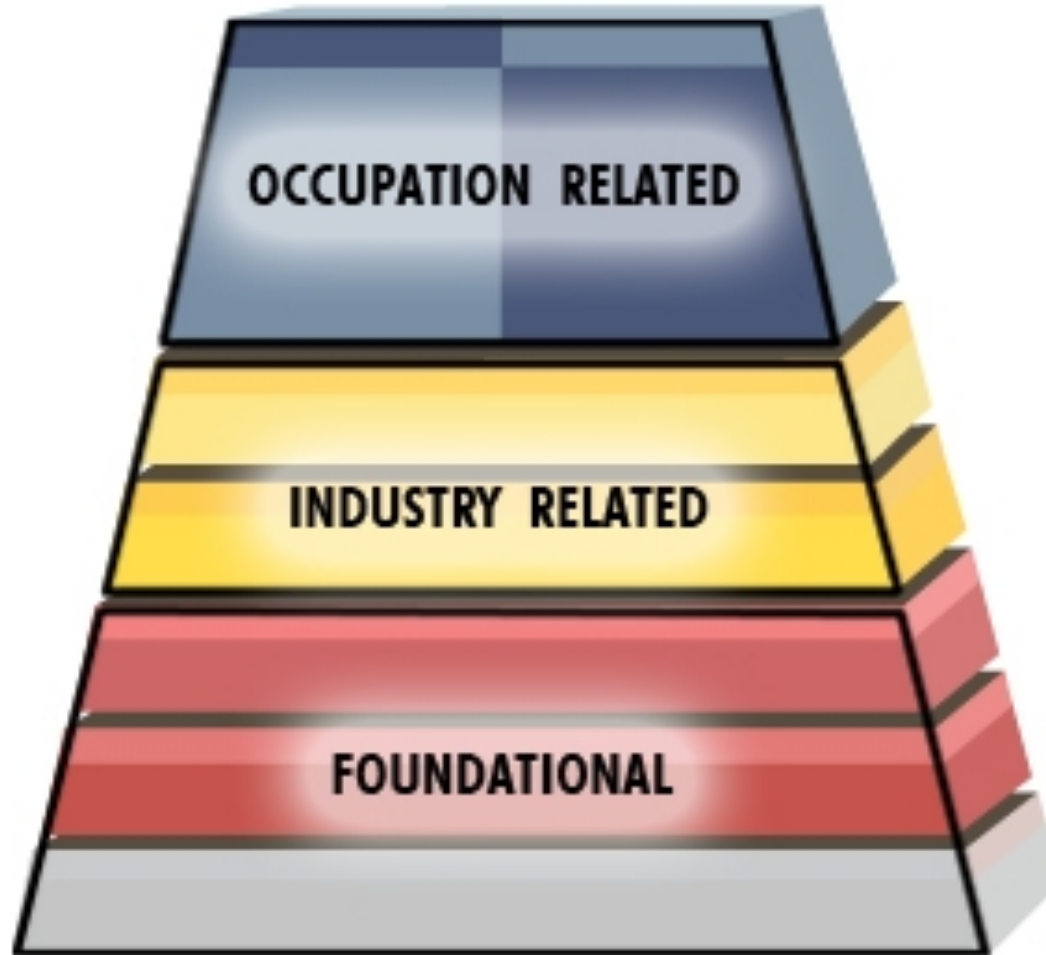
MATCH YOUR CURRENT JOB TO A JOB IN ADVANCED MANUFACTURING

Look for your current job title below, then select it to see matches to jobs within Advanced Manufacturing.

Prior Learning Assessment:

Earning College Credit for what you already know

Building the Education Strategy

Content

Communication

Collaboration

Capacity