

# Lifelong Learning and the Changing Role of the University

United States/European Union Roundtable:  
Higher Education and Workforce Development

Linking

**Craig D. Weidemann**

Vice President for Outreach / Penn State University

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# Lifelong Learning and the Changing Role of the University

- Educational Profile of U.S. Adult Learner
- Higher Education's Role in Economic Development
- Three Issues Facing Higher Education in Response to Lifelong Learning/Workforce Demands

# Educational Profile of U.S. Population, 25 and Older

- 28% have at least a bachelor's degree
- 25% have an associate degree or some college, no degree
- 40% of adults annually participate in some type of formal education for work-related reasons
  - 9% in college degree program
- Pool of potential adults for continuing higher education is significant
  - 57% of population 25+ have high school diploma, no bachelor's degree
  - 46M have taken some college courses, no bachelor's degree
    - One-third have associate degree
    - Large pool of degree completion candidates

# Adult Learners Are Growing Segment of U.S. Postsecondary Education Population

- Adults make up 39% of postsecondary enrollments in degree-granting institutions
  - Total of 6M adults
- Postsecondary enrollments of 25+ adults will grow by 19% from 2002- 2014
  - Postsecondary enrollment growth of 18-24 year olds will be only 16% in same period

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*At their foundation, economic development, workforce development, and community development are fundamentally intertwined and connected—you cannot consider developing one area without inclusion of the other two.*

Art Heim  
Delta Corporation

# Higher Education Raises Profile of Economic Development Efforts



# Higher Education's Three Dimensions of Economic Development\*

## Colleges and Universities



**Economic Impact**



**Human Capital Development**



**Innovation and  
New Knowledge  
Creation**

*\*Paytas, Jerry; Gradeck, Robert; Andrews, Lena. Carnegie Mellon University, Center for Economic Development. Universities and the Development of Industry Clusters, 2004.*

# Universities Impact the Economy

- Economic impact
  - Penn State → \$6.1B annually
  - University of Wisconsin System → \$9.5B
  - Johns Hopkins University → \$7B
- Education is powerful industry sector
  - U.S. postsecondary education market is \$320B
  - Education is targeted industry cluster in Pennsylvania

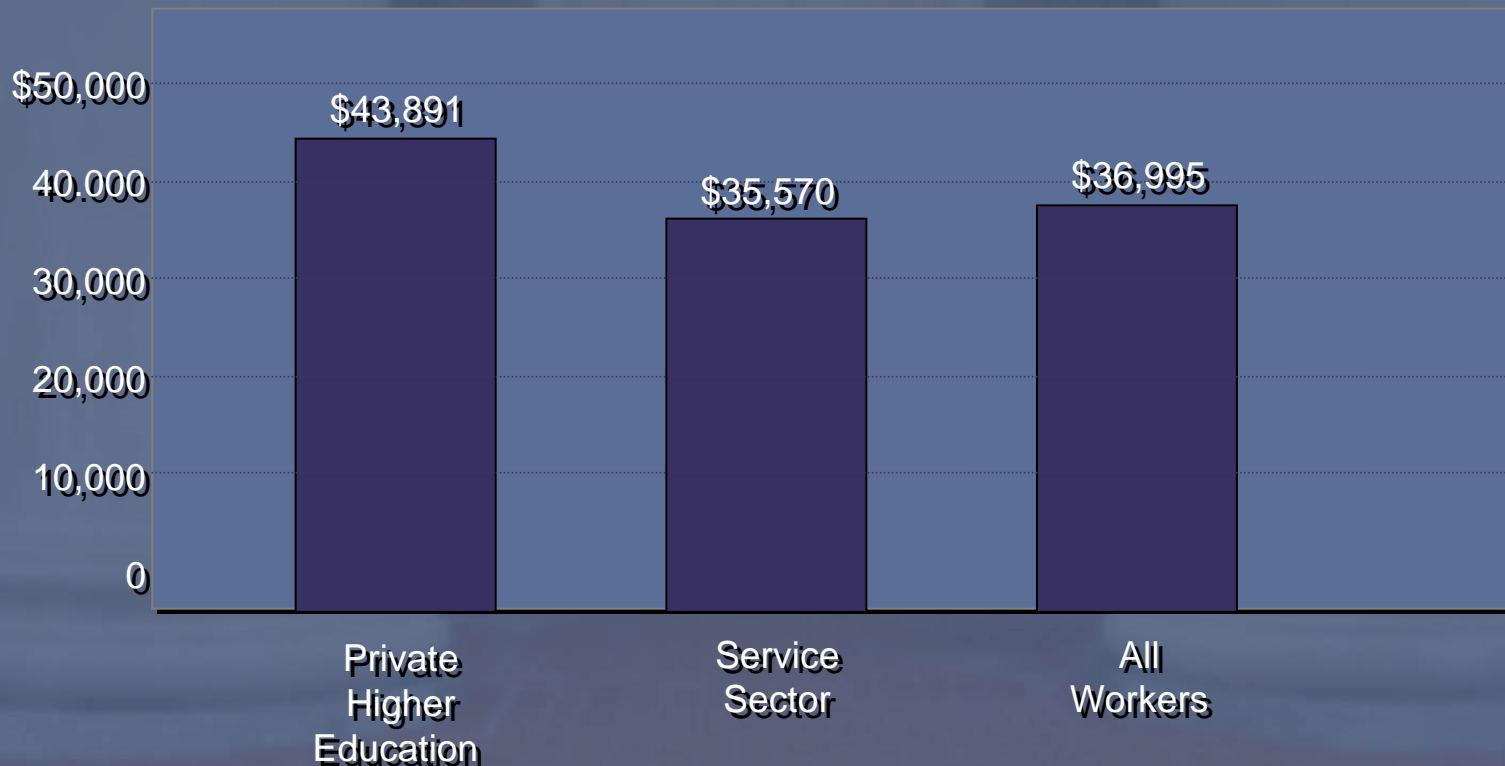
Economic Impact

Human Capital  
Development

Innovation and  
New Knowledge  
Creation

# Higher Education Provides Stable, Well-Paying Jobs

Average Annual Wage in Pennsylvania



Source: Brookings Institution, *Higher Education in Pennsylvania: A Competitive Asset For Communities*, 2005.

Economic Impact

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# Universities Foster Innovation and Create New Knowledge

## Technology Transfer and Universities

- 635 new technologies offered to public
- 16,871 invention disclosures
- 4,800 new licensed technologies
- 462 new companies based on academic research

*The game is changing. It isn't just about math and science anymore.  
It's about creativity, imagination and, above all, INNOVATION.*

Business Week, August 1, 2005

# Profile of Research Parks in North America

- 195 research parks and growing
- Employment average—3,399
- Average Acreage —532
- Average Number of Companies —41
- Average Capital Investment —(est.)  
\$186,280,327
- Two thirds have incubators

Economic Impact

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# Academic Entrepreneurship Centers

- 112 university-based centers across the U.S.
- National Consortium of Entrepreneurship Centers
- 1,600 U.S. colleges and universities offer courses in entrepreneurship

Economic Impact

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# Higher Education: Human Capital Development

*An educated, innovative workforce—human capital—is the most precious resource of any country in this new, flat world.*

National Academy of Sciences  
Rising Above the Gathering Storm:  
Energizing and Employing America  
for a Brighter Economic Future

# Lifelong Learning: Foundation of Innovation Economy

**Post-secondary education and training now required for increasing percentage of jobs**

- 80% of the fastest-growing jobs in the United States require some postsecondary education
- By 2012, the US will come up short by more than 7 million skilled workers
  - 848,000 shortage of two-year degree holders
  - 3.3. Million shortage of 4 year degree holders
  - 2.9 Million shortage of advanced degree holders

Economic Impact

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# Universities Develop Human Capital Through Lifelong Learning

- Postsecondary education for traditional students
- Internships/service learning
- Entrepreneurship education
- Degree attainment for nontraditional students
- Workforce training

Economic Impact

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# Universities Develop Human Capital Through Lifelong Learning

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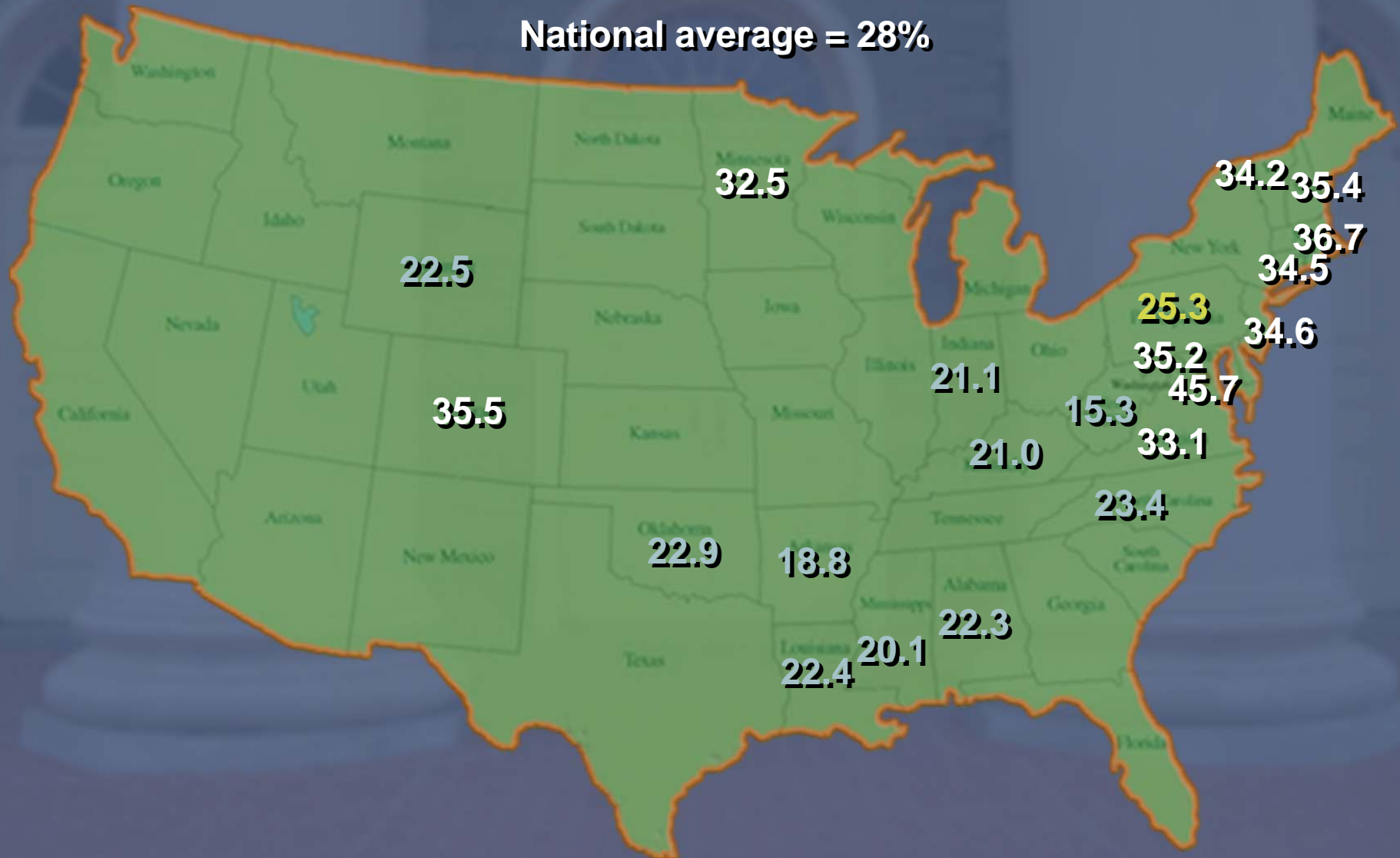
# Educational Attainment Becomes Economic and Competitive Differentiator for Regions and States

- **One point increase** in the percent of a local economy's population that is college-educated increases local economic growth over a ten-year period **by one-half point.**
- Increasing the proportion of college graduates in a local economy will increase the wage rates of other local, non-degree residents.

# Educational Attainment in the U.S.

% of population 25 years and over with bachelor's degree or higher

National average = 28%



Economic Impact

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# States Compete on Educational Attainment to Attract Economic Development Initiatives



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## Granholm, Cherry Announce Commission on Higher Education and Economic Growth

Contact: Heidi Hansen 517-335-6397

March 15, 2004

LANSING – Governor Jennifer M. Granholm today announced that she is creating a commission to focus on the future of higher education and its role in Michigan's 21st century economy. The commission will focus on doubling the number of college graduates and ensuring that they have the skills they need to succeed in the 21st century workplace.

The Governor has asked Lieutenant Governor John D. Cherry to head the commission, which will begin its work in June. The commission will be created by an executive order the Governor will sign by the end of March.

"Our higher education system is the jet fuel that propels our economy."

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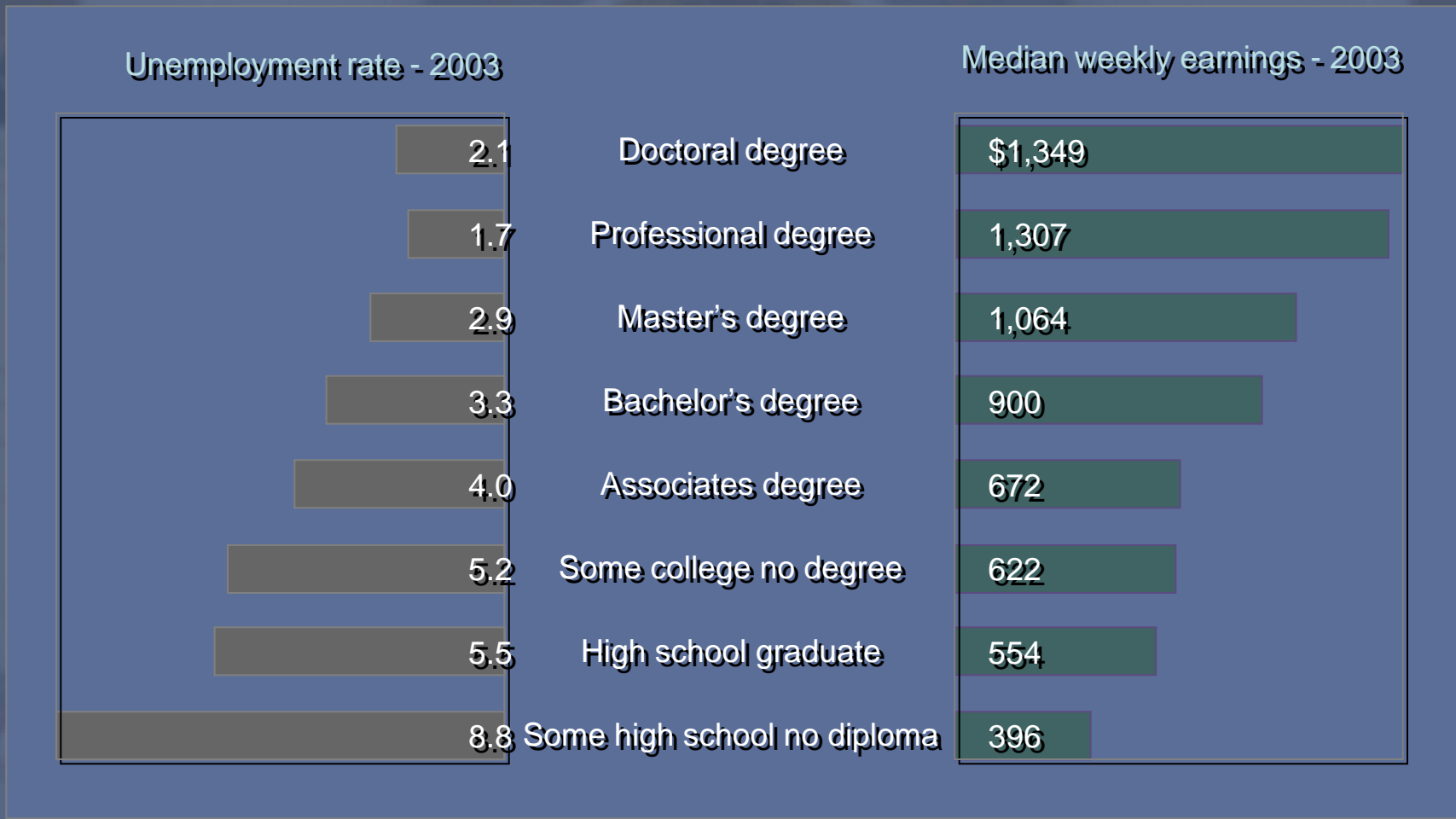
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*...our state's path to a robust economy with good paying 21st century jobs requires all our residents to complete their education beyond high school.*

Governor Jennifer Granholm - Michigan

# Higher Education Has Economic Payoffs

Reduces unemployment rates, increases incomes



Unemployment and Earnings - full-time workers over 25

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# #1—Financial Aid for Lifelong Learners

Percent of Undergraduate Receiving Student Aid, and Average Amount Received, 1999-2000



Source: UCEA, Lifelong Learning Trends, 2004.

# #1—Financial Aid for Lifelong Learners

- Student financial aid in U.S. designed for traditional student
- Less-than-half-time students get little financial support
- Education tax credits offer limited assistance
- Employers reducing volume and amount of tuition reimbursement

# #1—Financial Aid for Lifelong Learners

- Innovative financial aid initiatives required
  - Must tie financial aid to regional/state occupational priorities
  - Pennsylvania's WAGE Program
- Lifelong Learning Accounts (LILAs)
  - Funds must be portable
  - Provision in National Innovation Act
- Go Army Ed Program
  - One-stop portal for provider, course, program selection plus reimbursement
  - Army provides upfront funding for military personnel

# #1—Financial Aid for Lifelong Learners

- One out of 5 U.S. workers will be Hispanic
- Gaps among racial/ethnic groups in levels of education completed are widening
- If current trends continue: proportion of workers with high school diplomas and college degrees will decrease
  - Personal income of Americans will decline over the next 15 years.

## #2—Make Higher Education More Adult-Focused

- Degree completion programs are needed
  - Meet needs of 46M adults who already have some college
- Development of teaching strategies that meet multiple adult learning styles
- Expand use of alternative methods for recognition for workplace learning
- Ease transfer of credit

## #2—Make Higher Education More Adult-Focused

- Provide flexible delivery options
  - Flexible scheduling
  - Expand use of technology to increase access
    - Online enrollments increased to 2.35M in 2004
    - Online enrollments - annual growth rate of 18%+
    - 29% of corporate tuition reimbursements go to online or blended programs

## #2—Make Higher Education More Adult-Focused

- Credit for prior learning/transfer of credits
- Portfolio assessment
- Flexibility delivery options
  - Online enrollments increased to 2.35M in 2004
  - Annual growth rate of 18%+
  - 29% of corporate tuition reimbursements go to online or blended programs

# #3—Align Curricula and Adopt New Metrics of Quality and Success

- Institutions of higher education must respond to States move to focus on target industry clusters
- Programs must respond to emergence of new, interdisciplinary occupations
- Curriculum and review process must become more responsive
  - Built to meet industry needs
  - Time to delivery

## #3—Align Curricula and Adopt New Metrics of Quality and Success

- Current measures designed for traditional age student
- Traditional institutional measures don't work for lifelong learners

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