



INSTITUTE FOR A COMPETITIVE WORKFORCE

Institute for a Competitive Workforce (ICW)

Works to ensure that businesses have access—today and tomorrow—to an educated and skilled workforce.

Promotes high educational standards and effective workforce training systems so that they are aligned with each other and with today's rigorous business demands.

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*“Human capital is the number
one business challenge”*

Tom Donohue, President and CEO
U.S. Chamber of Commerce

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An Aging Workforce

- **150 million** Americans currently in the workforce
- **77 million** 'Baby Boomers' nearing retirement
- Only **40 million** Gen X'ers and Y'ers available to replace them



FOR EVERY 100 9TH GRADERS:



68 GRADUATE ON TIME;



OF THOSE, 40 ENROLL DIRECTLY IN COLLEGE;



OF THOSE, 27 ARE STILL ENROLLED THE FOLLOWING YEAR;



OF THOSE, 18 EARN AN ASSOCIATES DEGREE WITHIN
3 YEARS OR A B.A. WITHIN 6 YEARS.

82 DON'T MAKE IT!

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Spending on Remedial Education and Private Training

United States

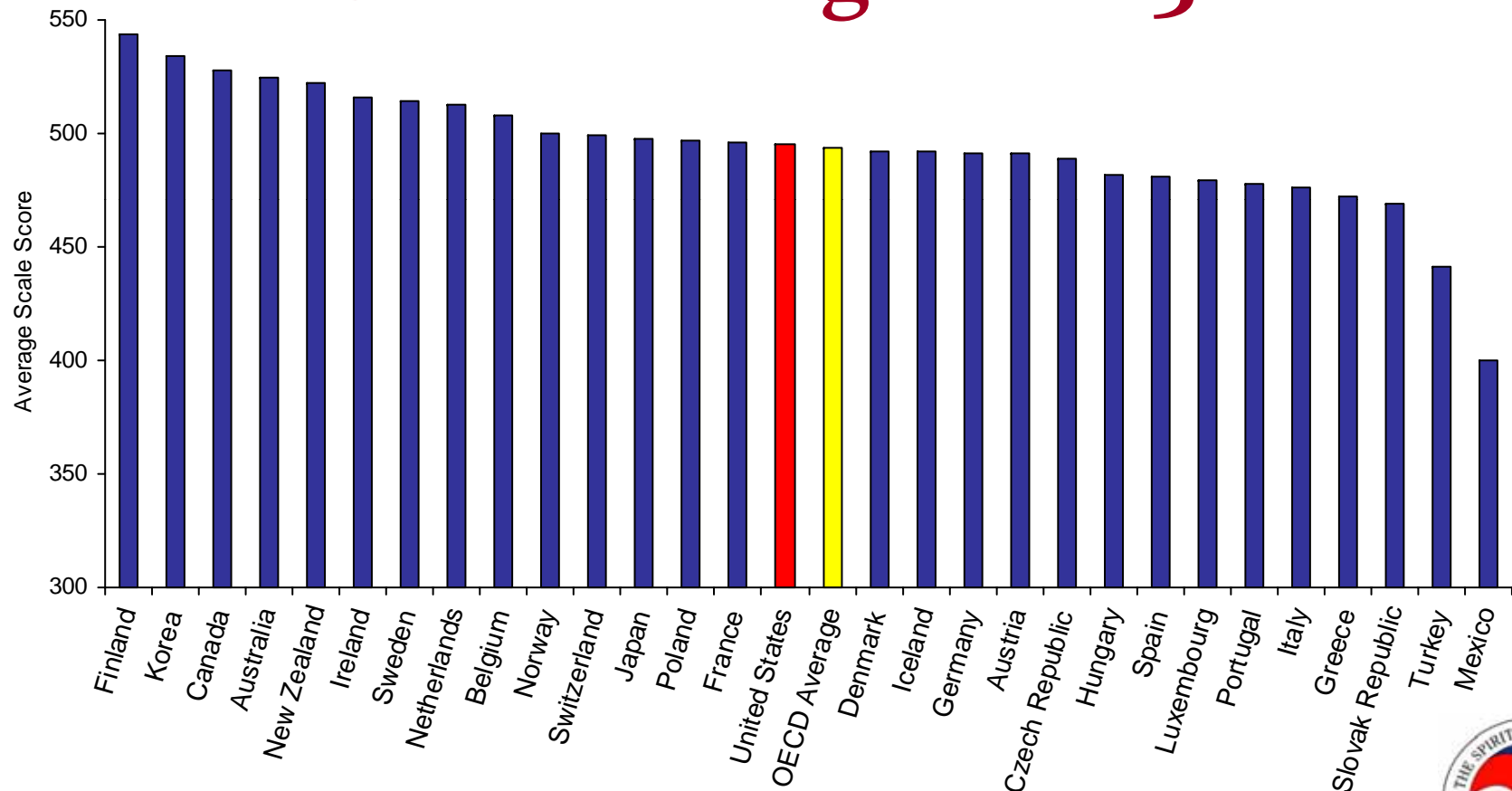
\$3.7 billion spent per year on remedial education

\$58.5 billion spent per year on private training

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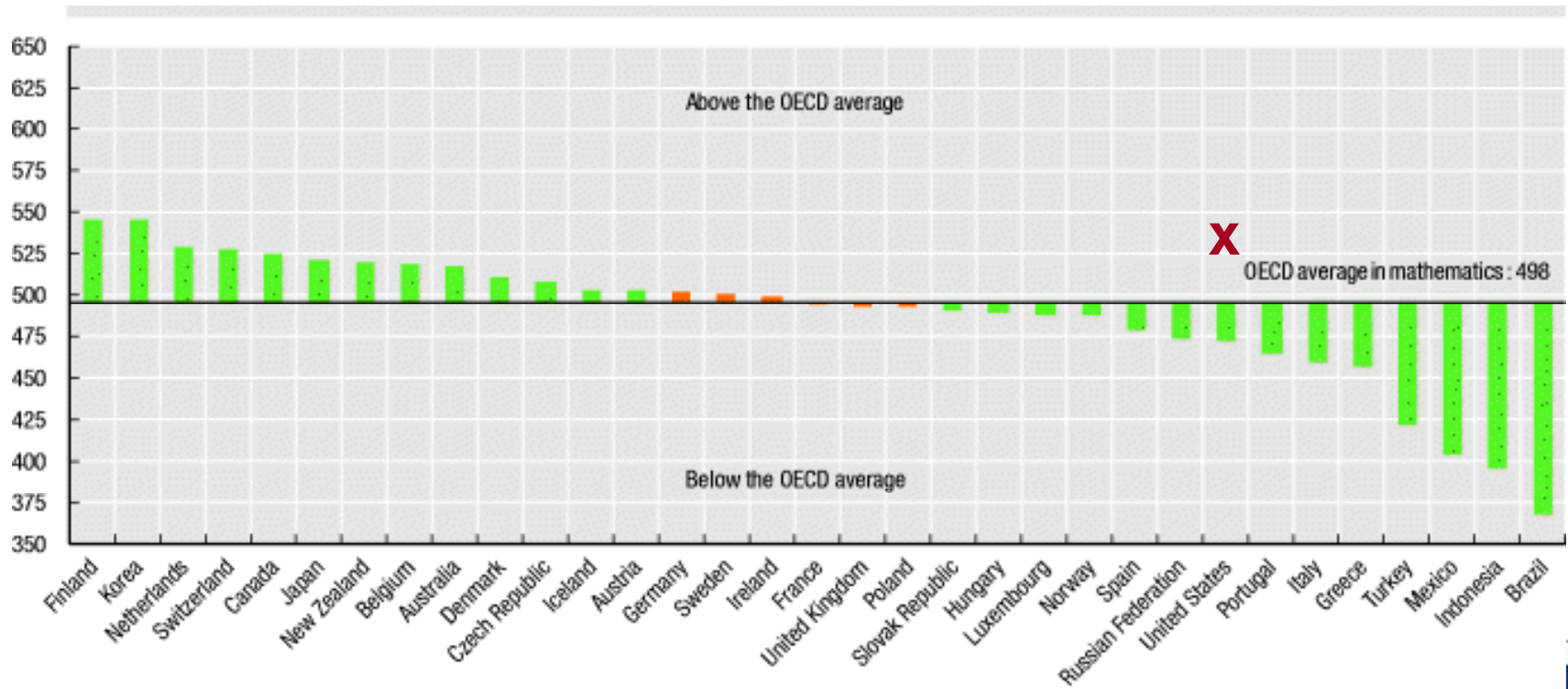
U.S. Reading in 2003



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U.S. Math in 2006



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U.S. Science in 2006

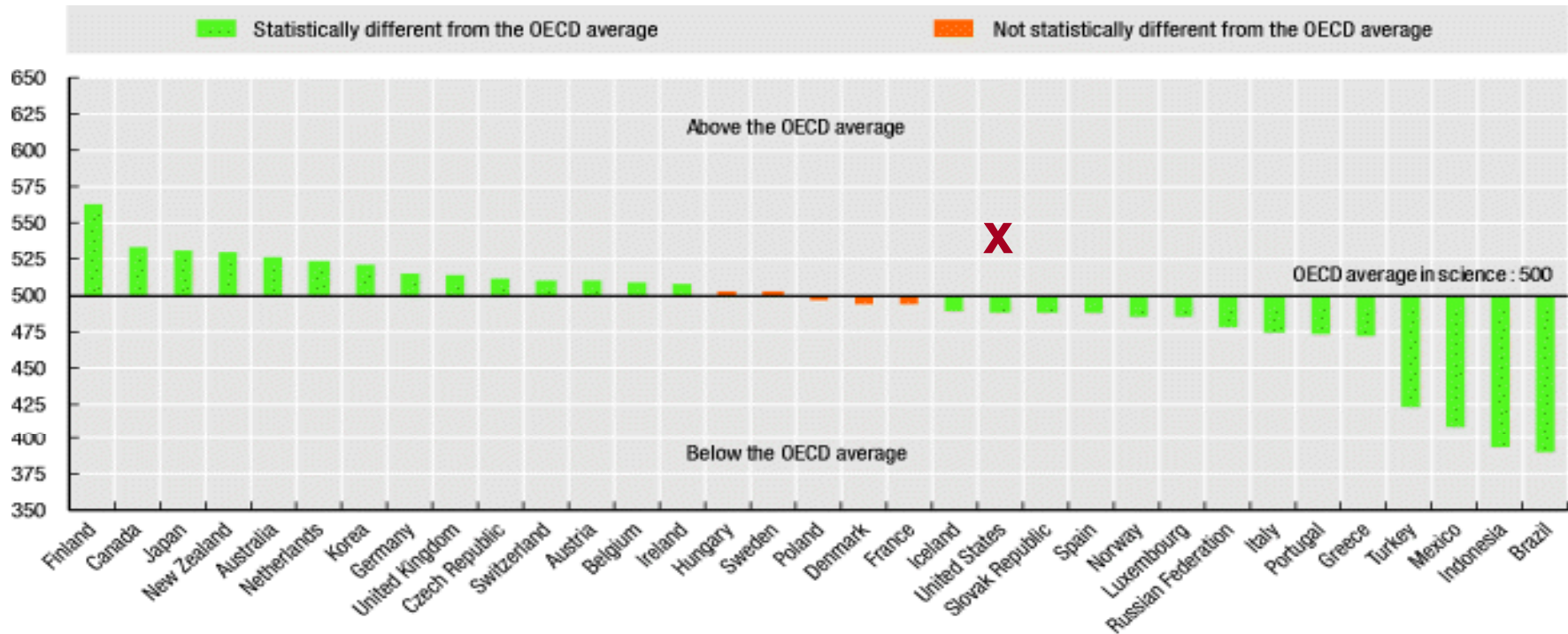
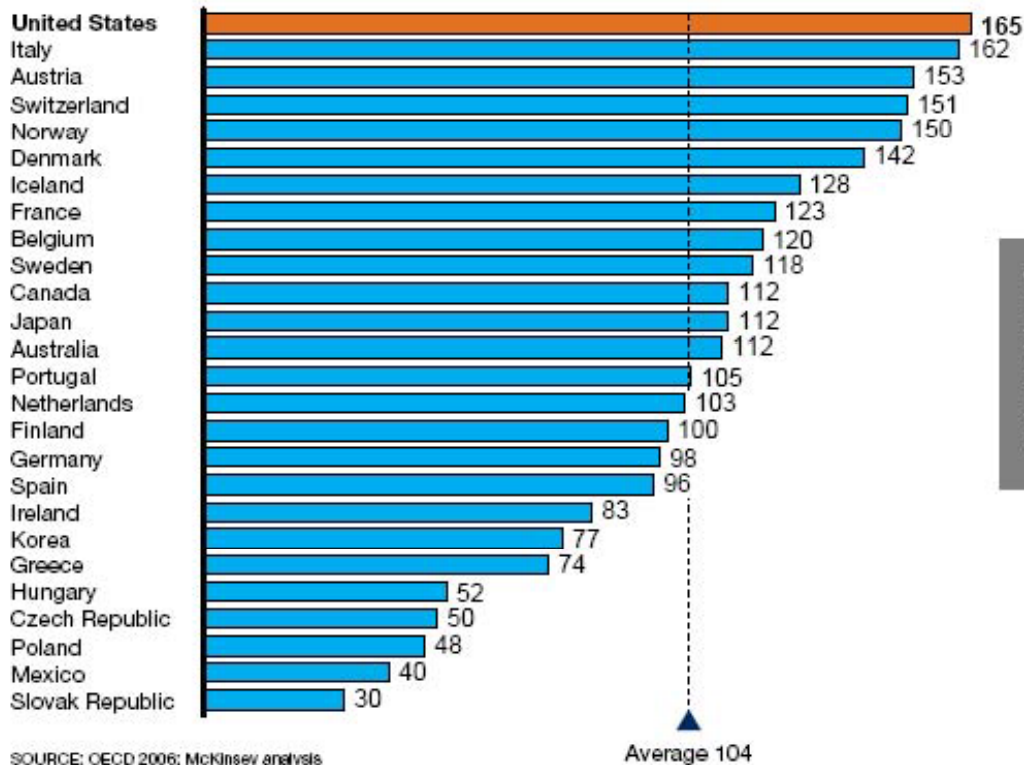


Exhibit 3

The United States spends more than any other country per point on PISA mathematics test

School spending cost-effectiveness

\$ in cumulative spending per student per point on PISA mathematics, 2003



SOURCE: OECD 2006; McKinsey analysis

The US spends \$165 to get a point on PISA math, about 60% more than the OECD average

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The Global Competitiveness Numbers Game

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If India and China successfully train 10% of their population, their skilled workforce would be nearly equal to our entire workforce

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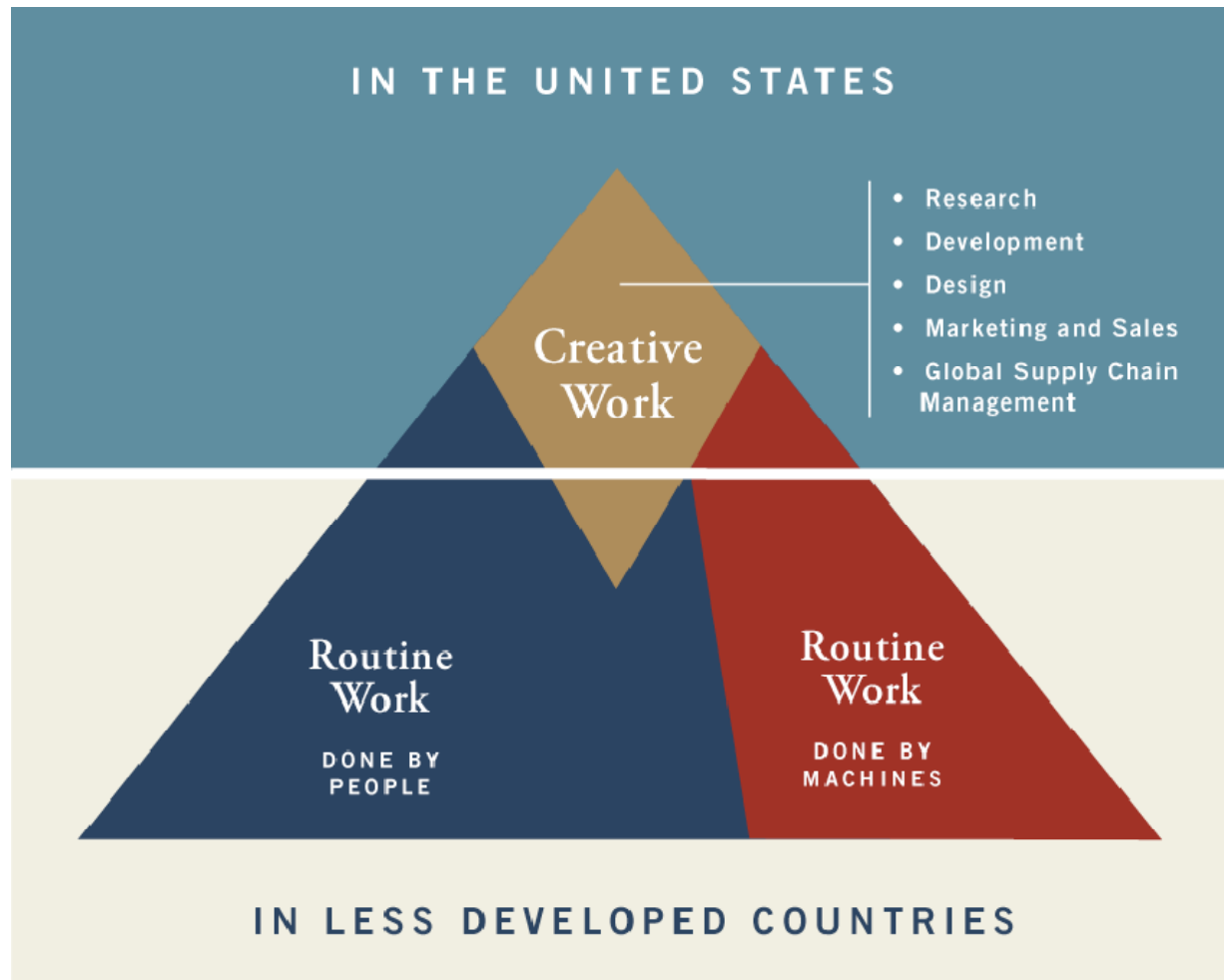


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U.S. Strengths and Opportunities: Creating a powerful workforce for the 21st Century

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Source: *Tough Choices or Tough Times* report - NCEE

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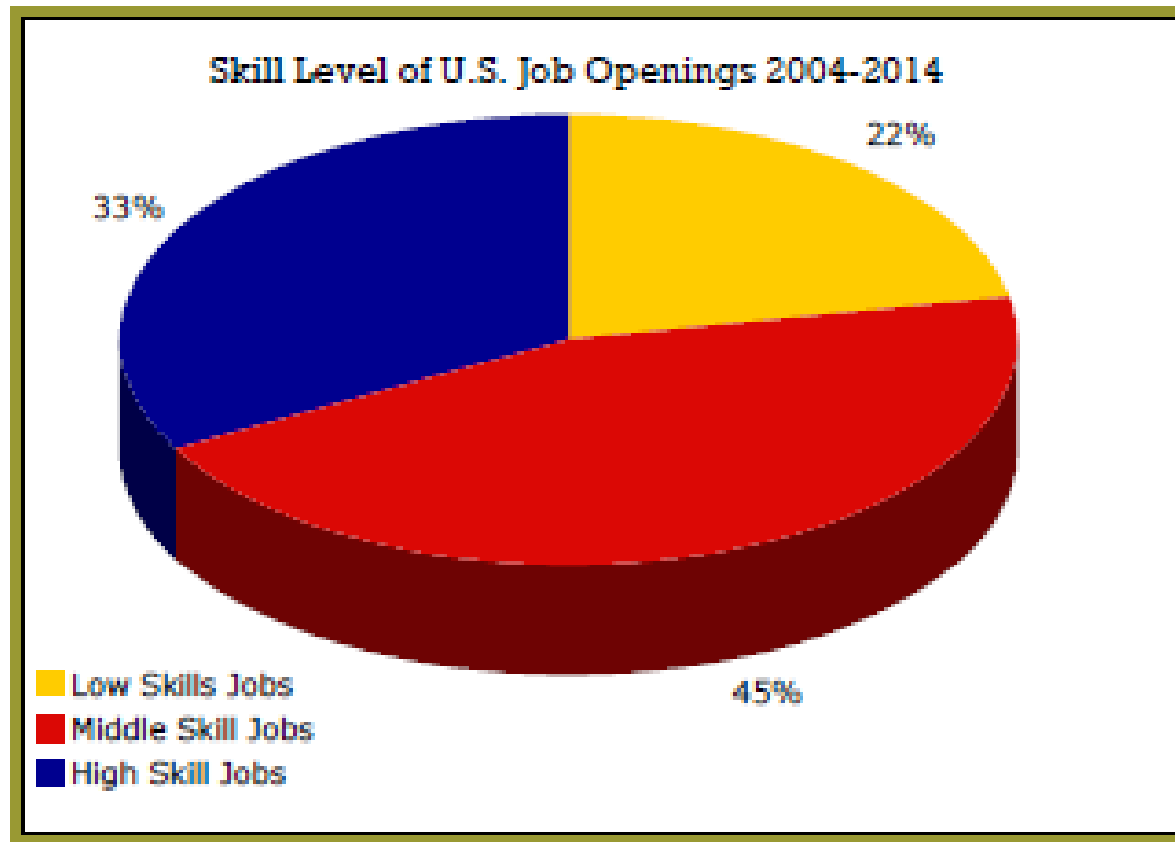


Figure 1: High and Middle Skill Jobs Dominate the Economy

Source: Harry J. Holzer and Robert I. Lerman, *America's Forgotten Middle-Skill Jobs*, 2007. www.Skills2Compete.org

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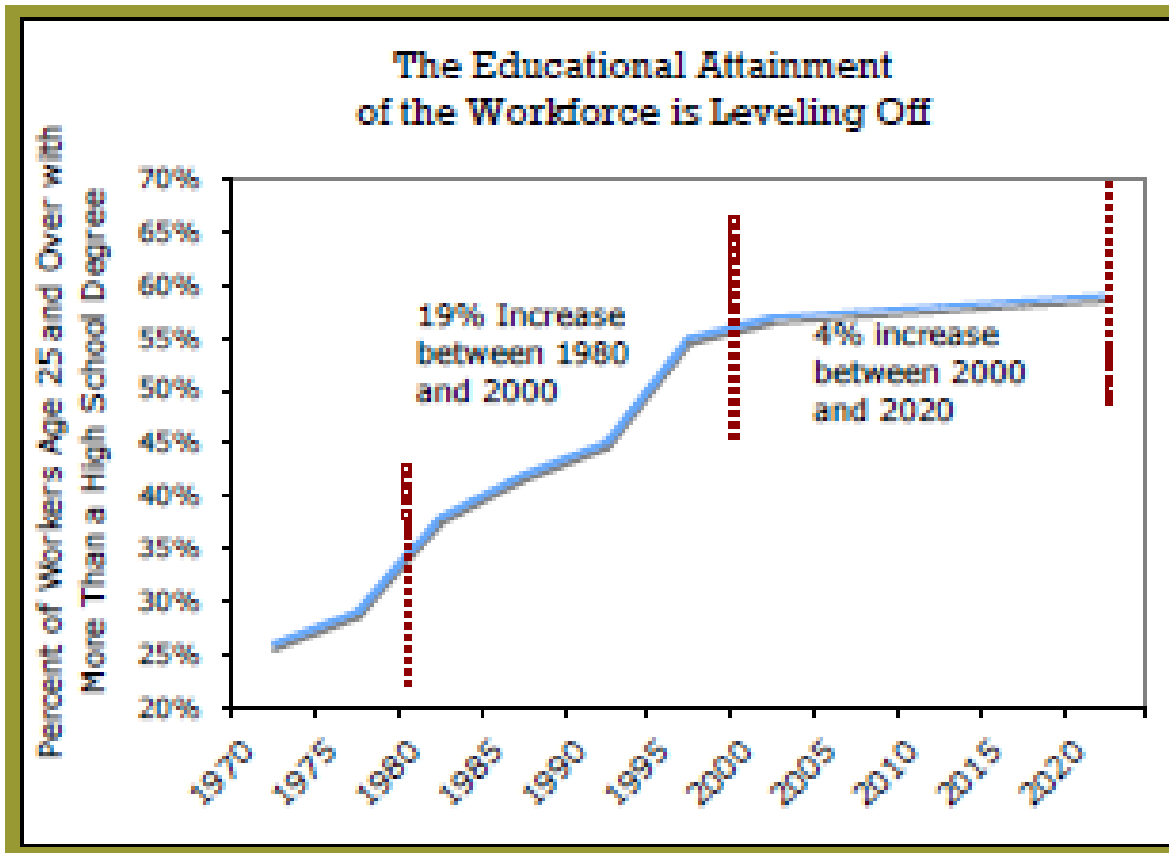


Figure 2: The Skills of the Workforce of the Future

Source: Aspen Institute, Grow Faster Together. Or Grow Slowly Apart., 2003

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IV. Your Friends in Business



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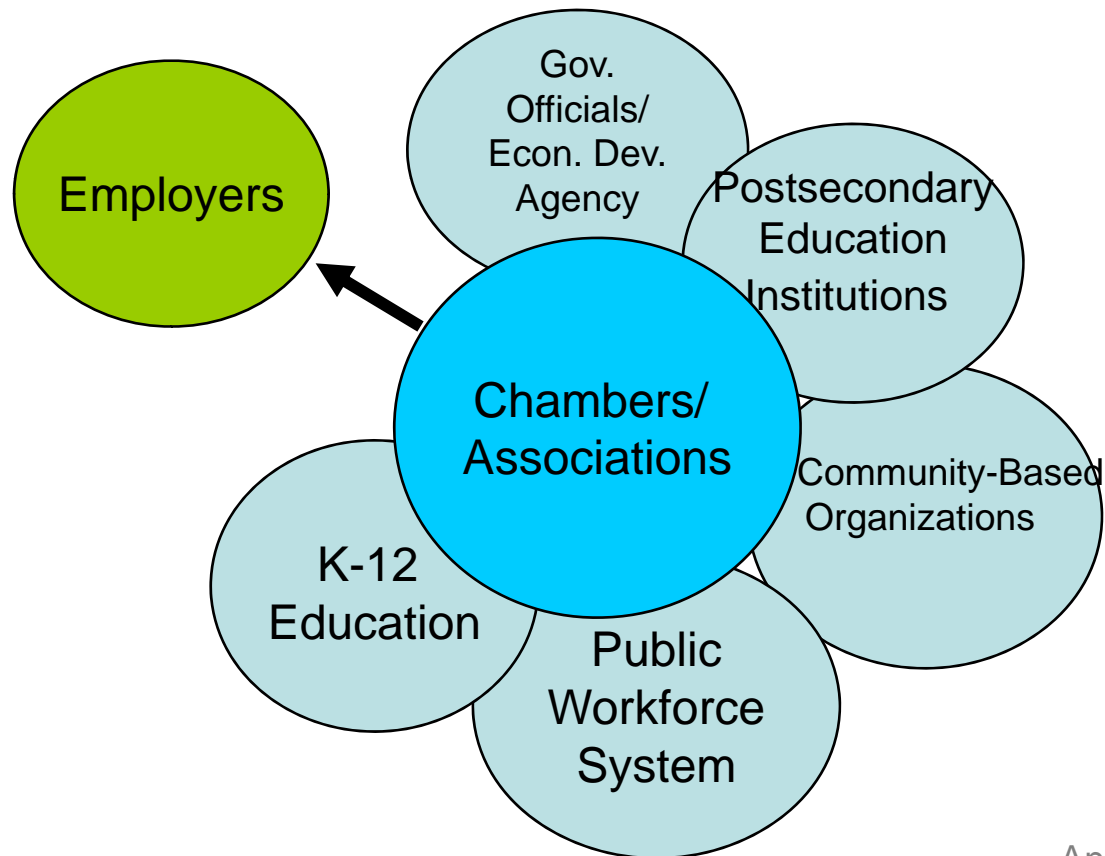
Economic Context of CTE

- CTE increases high school graduation rates
 - By providing relevancy in education, students are more likely to stay in school
- CTE constantly adapts to the needs to state and national economic/workforce needs
 - Provide programs for high skill, high wage, and high demand occupations

Principles of CTE

- Career and post-secondary readiness
- Rigorous
- Relevant
- Project-based
- Effective

Your Community



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Business Engagement in CTE

- *Programs*, i.e. curriculum, awareness, etc
- *Students*, i.e. apprenticeships, internships
- *Teachers*, i.e. externships, career-to-teach
- *Policies*, i.e. state and local chambers

Programs

- **Curriculum, Content, and Equipment**
Review to ensure that they reflect what's required in today's workplace.
- **Classroom Instruction and Interaction**
Discuss how course content is directly applicable to careers and postsecondary education requirements.
- **Career Awareness**
Ensure that your business or industry is represented at job and career fairs, your industry.
- **Project/Business Plan Competitions**
Help design and review CTE-related competitions

Students

- **Job Shadowing, Internships, and Apprenticeships**

Provide structured learning opportunities for them.

- **Tutoring, Coaching, and Mentorships**

Work with a select number of students each year.

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Teachers

– Externships

Provide structured learning opportunities for teachers in the workplace to expose them to current work practices, requirements, and connections to the classroom.

– Career-to-Teacher Initiatives

Allow and encourage employees in your company to take sabbaticals to teach, or investigate launching a formal program that puts experienced workers in front of the classroom.

Policies

- Develop a clear policy statement from your chamber calling for strong CTE programs throughout the entire school system.
- Form local quick response teams to mobilize grassroots action if CTE programs are jeopardized due to funding shortages or political issues or new programs are being discussed.
- Support local surveys that indicate current and future employment needs.



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Case Studies

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Santa Ana CA

High School Inc.

- Business-driven curriculum at public school
- HSI partnership has own board
- Six clusters, 75% overlap
- Field trips to industry facilities, equipment demonstrations by managers and foremen, internship opportunities, job shadowing, and part-time jobs

Pensacola FL

Gulf Power Academy

- Located at West Florida High School of Advanced Technology
- Based on the National Center for Construction Education and Research's electrical curriculum
- 15 hours of credit through articulation agreement with Pensacola Junior College
- The first class graduated in May 2005 (21 students)
 - Gulf Power hired 8
 - 2 entered the military
 - 2 went on to work in related industries
 - 9 attended college/post-secondary

San Antonio TX

Alamo Aerospace Academies

- Partnership of business, cities, secondary schools
- Pathways through dual-credit programs
- Internship program thru Lockheed Martin, others
- 95% of graduates obtained work in aerospace industry or continued on to post-secondary institution



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University of Missouri

Center for Excellence in Radiation Protection Technology (RPT)

- DOL grant to establish academic degree program
- National network of community colleges and the business community
- Curriculum follows guidelines set by accrediting organizations
- Employment at nuclear power, radioactive waste-handling, radiopharmaceutical, universities and research, medical, Department of Energy

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Spokane WA

Career Awareness Program facts

- 220 educators, 500 students, 11 schools involved
- 3,000 packets, 10,000 brochures distributed
- Over 500 teachers have received materials
- Eight “Teach the Teachers” workshops

- Campaign covered seven separate times in *The Spokesman Review* and twice in the *Journal of Business*
- GSI received the Association of Washington Business Community Service award in the category of education two years in a row.

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Sacramento CA

LEED: Linking Education and Economic Development

- Board driven by local leaders
- Workforce, educational and student development
- Project Lead the Way
- Regional Workforce Forecast & CareerGPS.com
- Released Regional CTE White Paper

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Critical Next Steps

- Data Requirements
- Standards
- Integration
- Teachers

Business Messaging

Talk to them in terms that matter to them.

“This initiative will result in higher numbers of young people who graduate from high school with the skills that they need for success in school, work, and life.”

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Role of CTE in Economic and Workforce Development

- Constantly adapts to changing needs
- Direct relevancy and link to work
- Increases high school graduation rates
- STEM
- Framework for lifelong learning



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