PATHWAYS TO PROSPERITY: FROM REPORT TO ACTION

ROBERT SCHWARTZ

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AN INITIATIVE OF JOBS FOR THE FUTURE AND THE HARVARD GRADUATE SCHOOL OF EDUCATION

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Education Level of U.S. Labor Force



HARVARD GRADUATE SCHOOL OF EDUCATION

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U.S. On-Time Completion Rates Are Alarmingly Low



Note: Four-year schools have a six-year graduation window; two-year schools have a three-year graduation window. Source: Condition of Education, NCES, 2013



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By 2020, College for All ≠ BA for All 65% of All Jobs Do Not Require a BA



Source: Recovery 2020, Georgetown Center on Education and the Workforce, 2013

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Examples of Jobs that Require Middle Skills

Sector	Type of Job	Number of Openings	Median Annual Pay
Computers & IT	Computer Support Specialists	607,100	\$46,260
Engineering	Electrical Technicians	151,000	\$56,040
Health Care	Respiratory Therapists	112,700	\$54,280
Life, Physical & Social Sciences	Environmental Science Technicians	29,000	\$41,380
Production	Semiconductor Processors	21,100	\$33,130

Source: "Who Can Fix the Middle Skills Gap?" Harvard Business Review, 2012, T Kochan, D Finegold, P Osterman Data from Occupational Outlook Handbook, U.S. BLS, 2010



AN INITIATIVE OF JOBS FOR THE FUTURE AND THE HARVARD GRADUATE SCHOOL OF EDUCATION In the Face of Increasing Demand for Skilled Workers, We Are Unable to Keep Up...

TODAY:

14 million 3 million jobs vacant

In a 2011 McKinsey survey of 2,000 U.S. companies, **two thirds reported difficulty in filling job vacancies** for reasons including:

- insufficient job experience
- unsuitable work habits
- insufficient educational qualifications
- poor communication ability



- **43%** of young workers with Licenses and Certificates earn more than those with an Associate's degree
- 27% of young workers with Licenses and Certificates earn more than those with an Bachelor's degree
- **31%** of young workers with an Associate's degree earn more than those with an Bachelor's degree



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STEM Opportunities Abound



Previous STEM studies have neglected the many blue collar and technical jobs that require considerable STEM knowledge. But this study finds that



of STEM jobs **do not require** a bachelor's degree.

As a result, STEM knowledge plays a much larger role in our economy than previously thought:



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In Many OECD Countries, >50% of Upper Secondary Students are in VET (CTE)



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Availability of CTE in Secondary Schools Increases Graduation Rates



Share of Upper Secondary Students in Career Tech

Source: OECD Education at a Glance

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School Completion: Dramatic Change in Global Skill Supply; U.S. Stagnation



Source: Schleicher (2007) based on OECD data. Approximated by percentage of persons with high school or equivalent qualifications in the age groups 55-64, 45-55, 35-44, and 25-34 years

A Graduation Uptick

After a lengthy stagnation, graduation rates among young adults surged between 2000 and 2010, especially among blacks and Hispanics.



Source: Levy & Murnane. Dancing with Robots. Third Way. www.thirdway.org

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US College Attainment Rates Lag As Well



Source: Organisation for Economic Co-operation and Development, Education at a Glance 2013 (2011 data)

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Youth Unemployment in OECD Countries



Source: OECD Labour Force Statistics Database.

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Global Innovation and Competitiveness: Switzerland at the Top

Rank	European Innovation Scoreboard 2010	WEF Global Competitivene ss Index 2011-2012	IMD World Competitivene SS Scoreboard 2011
1	Switzerland	Switzerland	Hong Kong
2	Sweden	Singapore	USA
3	Denmark	Sweden	Switzerland
4	Germany	Finland	Singapore

Sources: EIS: European Innovation Scoreboard, 2012 WEF: Global Competitiveness Report, 2012 IMD: World Competitiveness Yearbook, 2012



"And so tonight, I ask every American to commit to at least one year or more of higher education or career training. This can be community college or a four-year school; vocational training or an apprenticeship. But whatever the training may be, every American will need to get more than a high school diploma."

> President Barack Obama Speech to Joint Session of Congress, February 2009

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Pathways Sponsorship Varies Across the Network

- Illinois: Governor, Illinois Pathways Interagency Committee
- **Massachusetts**: Secretaries of Education, Housing and Economic Development, and Labor and Workforce Development
- Missouri: Commissioner and Associate Commissioner of Education
- Tennessee: Commissioner of Education, state CTE director
- California: Senate President pro Tem
- Georgia: State School Superintendent
- New York: Commissioner of Education
- Ohio: Columbus Compact

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Four Levels of Pathways Work



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Sample State Strategies

• Massachusetts:

- Community colleges, WIBs, and employer associations leading the work in the regions
- Three secretariats co-lead at the state level

• Illinois:

- IL Pathways Interagency Committee
- Statewide Learning Exchanges

• Tennessee:

- Rural economic and community development strategy
- Science park, strong employer partners (VW, Wacker)

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Sample Regional Strategies

Hampden County (MA)

Advanced manufacturing pathway launched for 60 HS freshman cosponsored by regional manufacturing association, employment board, and community college

Long Beach (CA)

Regional intermediary org under development to support expanded internships, WBL for 20,000 students in Linked Learning academies

Metro Columbus (OH)

13 districts working with regional community college in state-funded consortium to expand access to high-value technical pathways leading to certifications or postsecondary certificates or degrees

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Example: IL State-Level Learning Exchanges

Key Functions of Learning Exchanges:

- 1. Provide Curriculum Resources
- 2. Expand Access to Equipment
- 3. Support Peer-to-Peer Networks
- 4. Provide Work-Based Learning
- 5. Sponsor Challenges
- 6. Provide Professional Development
- 7. Provide Career Development
- 8. Review Program of Study Model
- 9. Review P-20 Pipeline Performance







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Exemplary State Policies, Resources, and Initiatives

• New model legislation in some states, such as:

- AB 790 and SB 1070, CA (support Linked Learning approaches and expansion of career pathways)
- Career Clusters/Pathways, HB 186, GA

• New resources at state level, such as:

- Innovation Campuses, MO
- P-TECH Replications, NY
- California Career Pathways Trust Fund, AB 86, CA

• Employers driving interest in advanced manufacturing and IT pathways, such as:

- Volkswagen and Wacker in TN
- Cisco, IBM, Microsoft, Motorola, SAP, and Verizon in IL
- Southwire in GA

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Most Prevalent Career Areas of Focus and Greatest Pipeline Development Need

Information Technology

Cross-cutting and key to all 21st century careers, not just in IT fields

Health Careers

Growing field, career paths must be carefully chosen

Advanced Manufacturing

Few know the opportunities and salaries, stigma attached

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• Early Career Advising

 Most districts lack a systemic strategy to introduce young people to the world of careers beginning in middle grades

• 9-14 Pathways

- Few 9-14 pathways align and integrate high school career pathways with community college
- Community colleges' "high demand" career programs are not accessible to young entrants; therefore, integrated 9-14 programs of study must be built

AND THE HARVARD GRADUATE SCHOOL OF EDUCATION

• Intermediaries

 Communities lack organizations to serve as the "glue" between schools, colleges and employers: to convene, muster resources, align education with labor market needs. Chambers, sector organizations need to step up.

Employer Engagement

 Employers are not interested in general "please engage with schools" requests; instead, we need to engage employers to build talent pipelines for young professionals into specific career areas by partnering with community colleges and providing internships and other forms of work-based learning opportunities.

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State and regional work plans

- One- and three-year implementation metrics and goals
- Place-based strategies with practices, processes, and principles that can be scaled statewide
- Cross-site work on key levers
- Customized TA and support from JFF, Harvard, and other expert consultants around implementation
 - Based on work plan needs, with capacity-building focus
 - Webinars, convenings, site visits, coaching

Community of practice and Network collaboration



For more information, contact:

Nancy Hoffman nhoffman@jff.org 617.728.4446, ext. 132

Amy Loyd aloyd@jff.org 617.728.4446, ext. 282

Bob Schwartz Robert_schwartz@gse.harvard.edu 617.496.6303