

School Takes a Lot



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Professional Development in a “Real-World” Context

How do we know curricula, instruction and professional development are aligned to promote career readiness for our students?

Models of Prof. Development

Models of Prof. Development

— [Individual Guided Development

— [Observation and Assessment

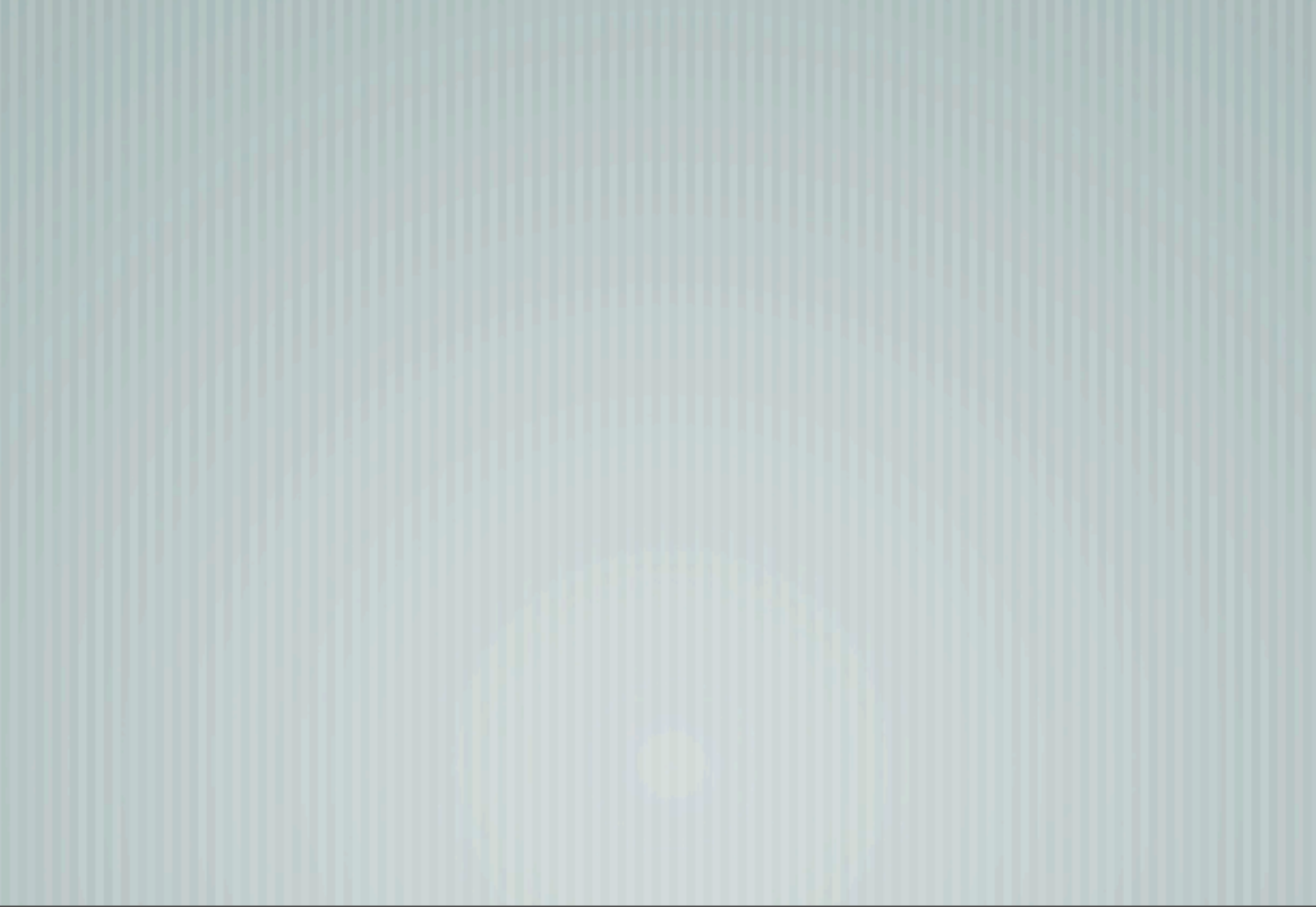
— [Involvement in a School Improvement Process

— [Training

— [Inquiry

NCREL

Who is involved?



Who is involved?



What?



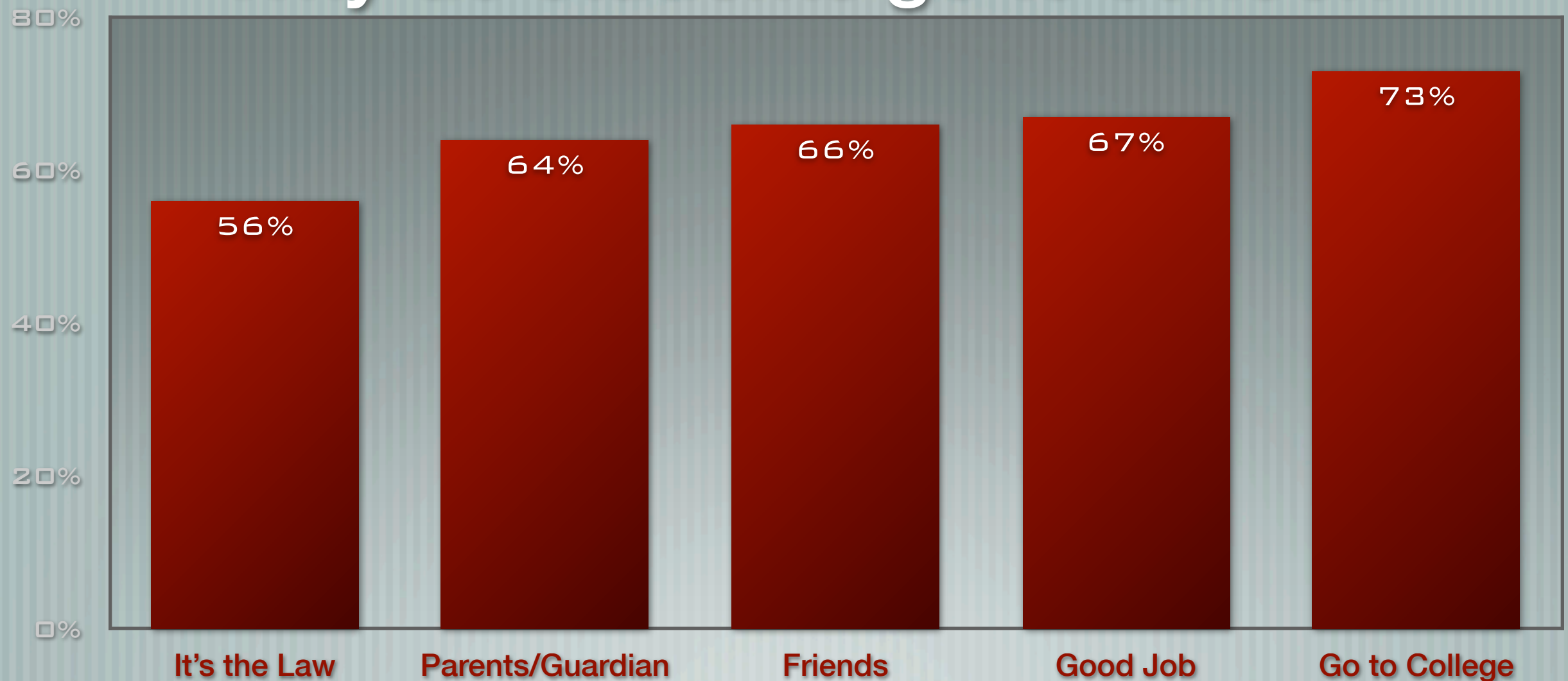
Where?



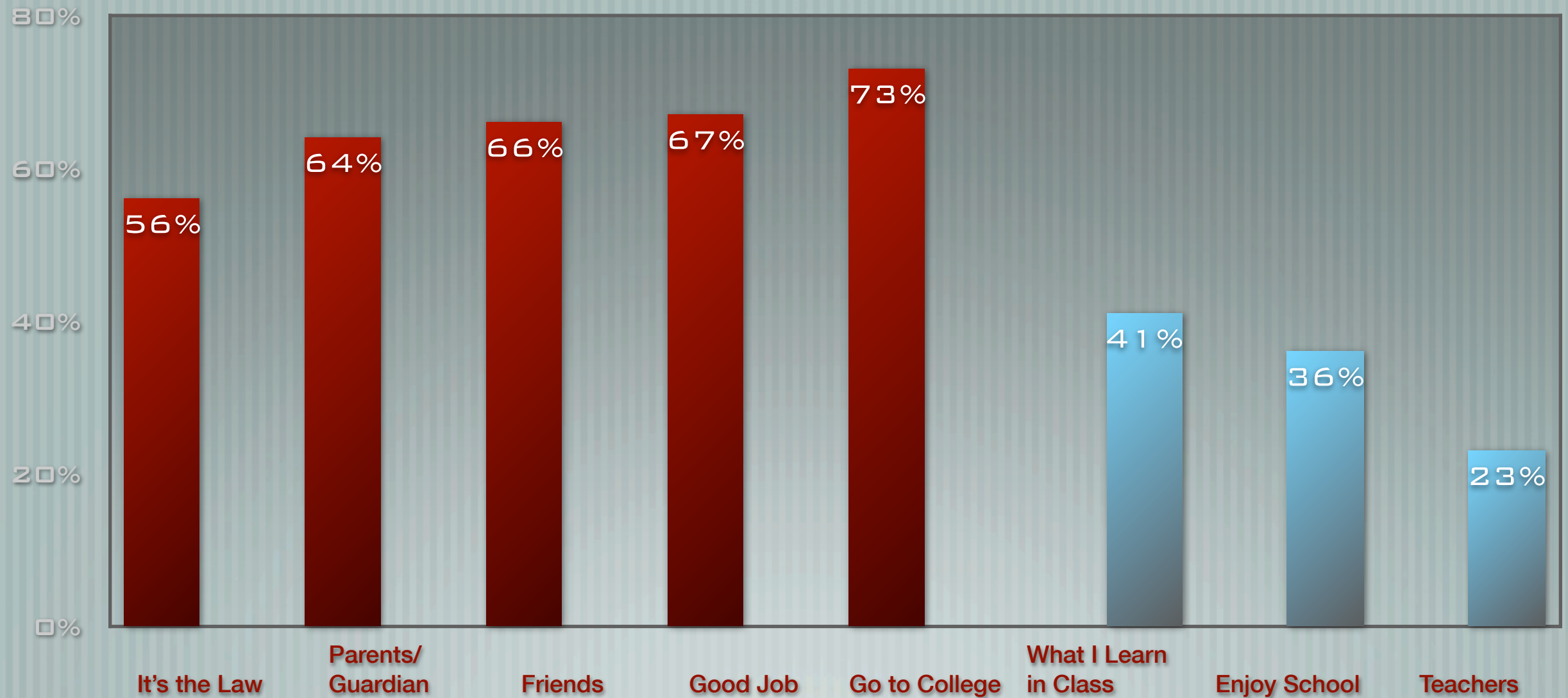
Does it even matter?

Does it even matter?

Why do students go to school?



Why do students go to school?



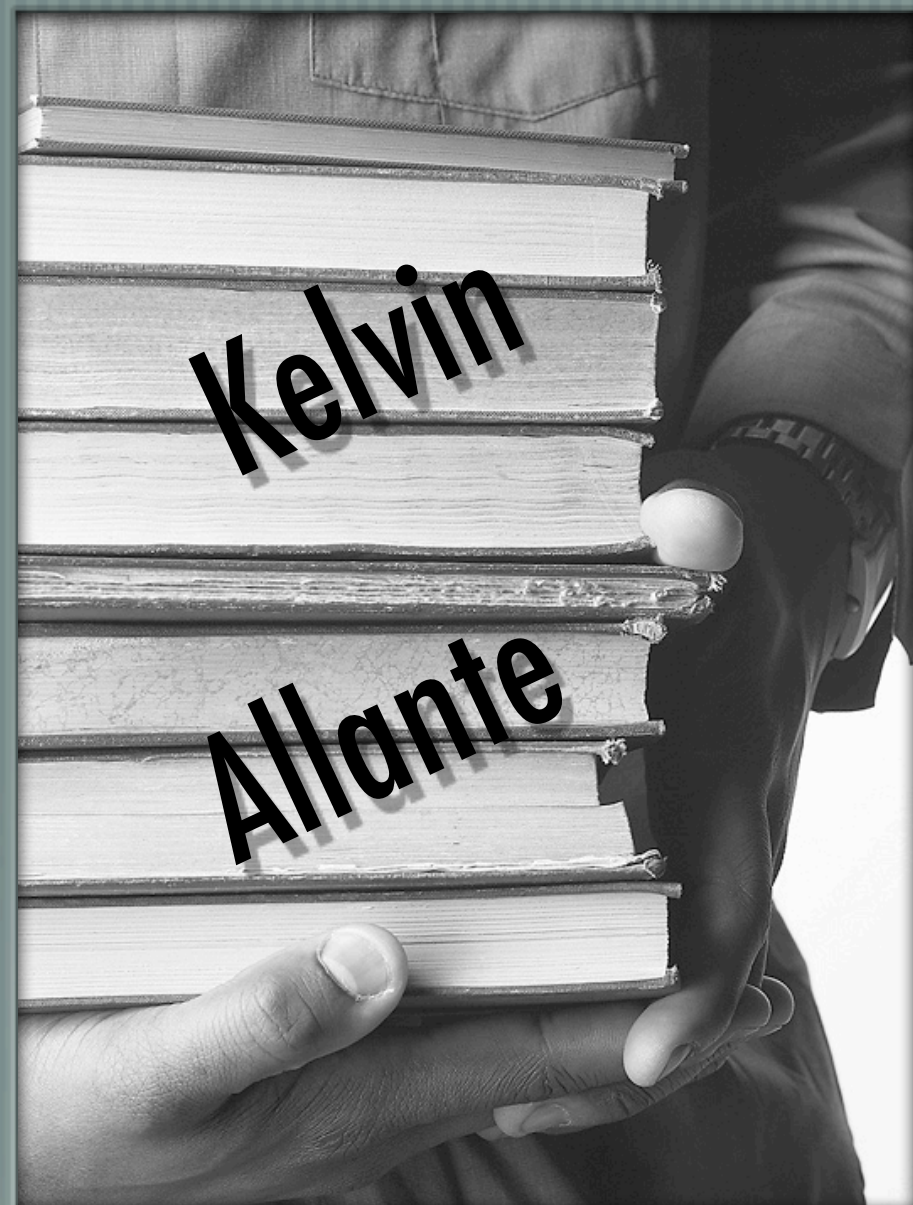
High School Study of Student Engagement 2009

Why do I have to know this?

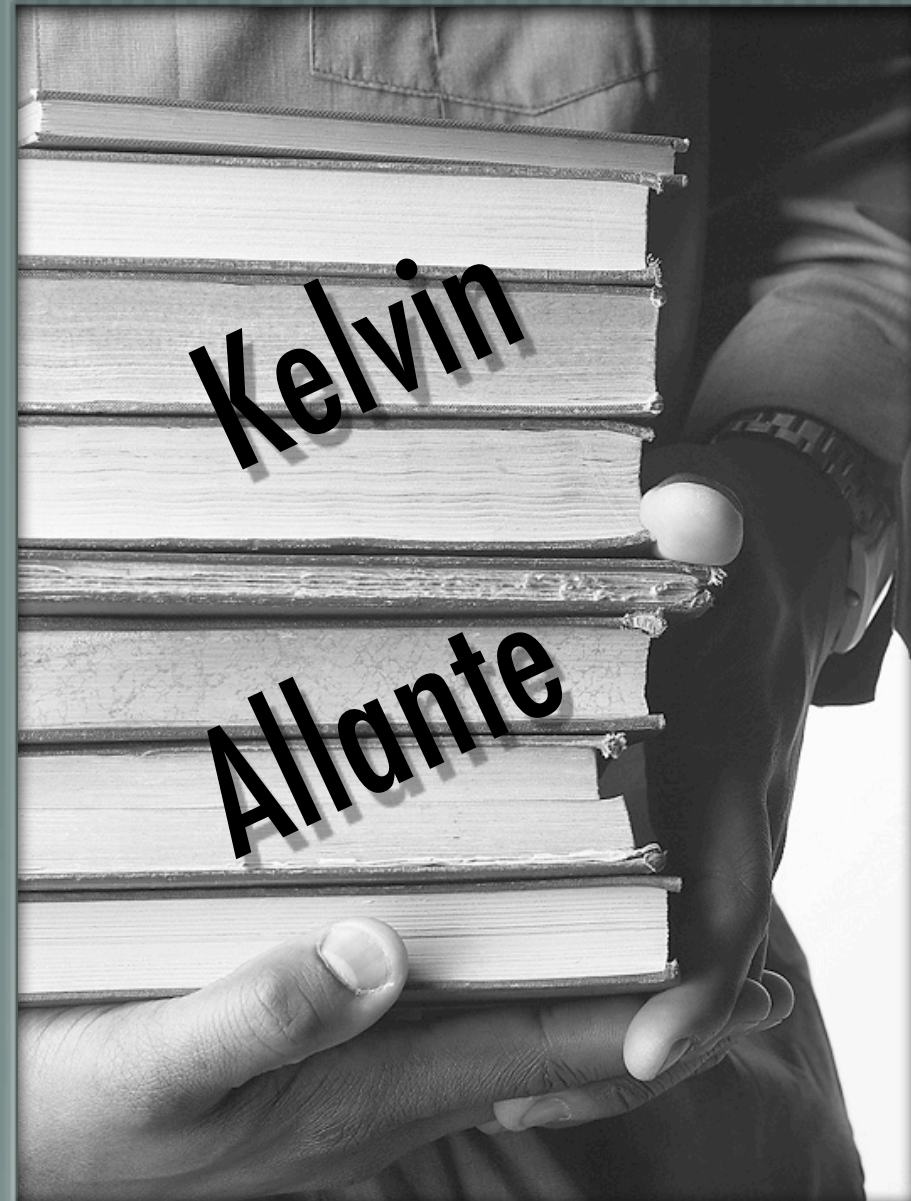
Why do I have to know this?







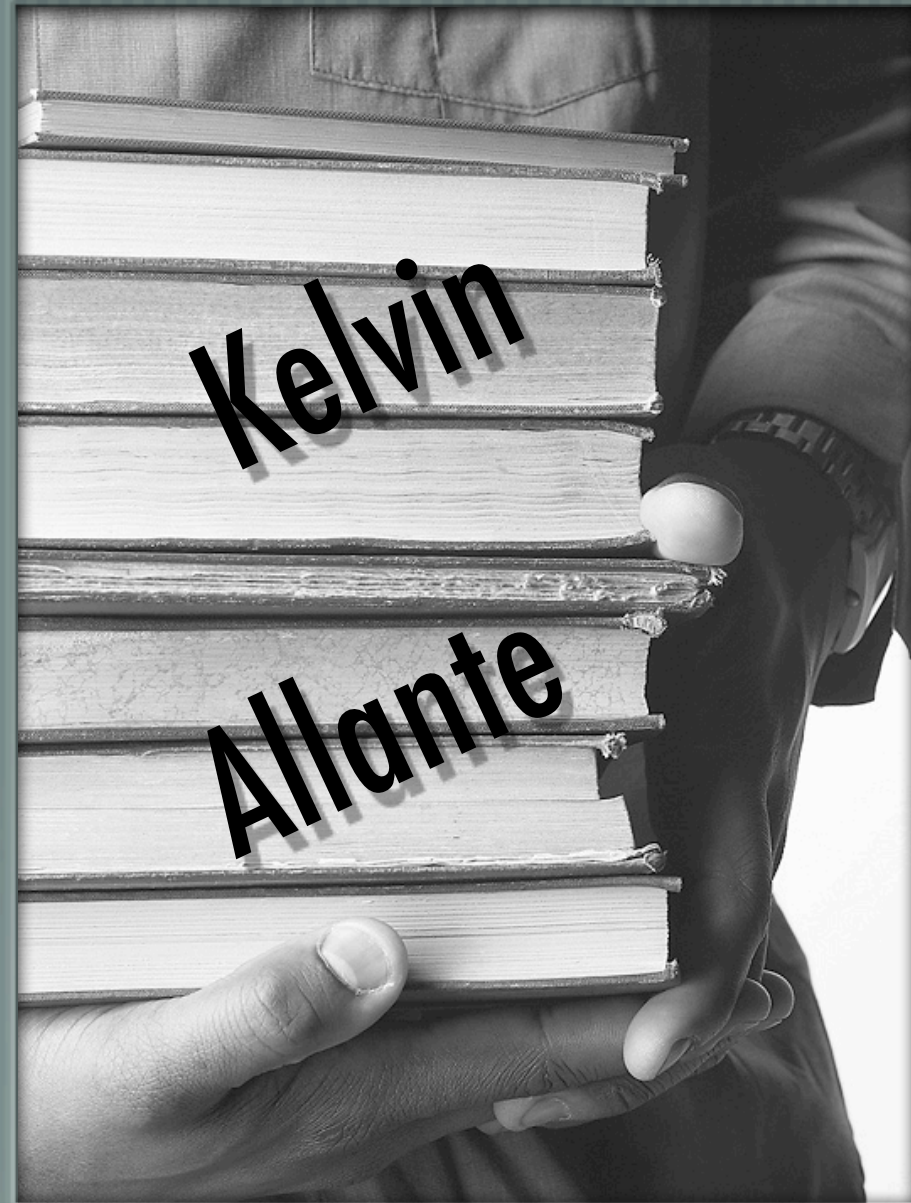
Meaningful



Connected



Meaningful



Kelvin
Allante

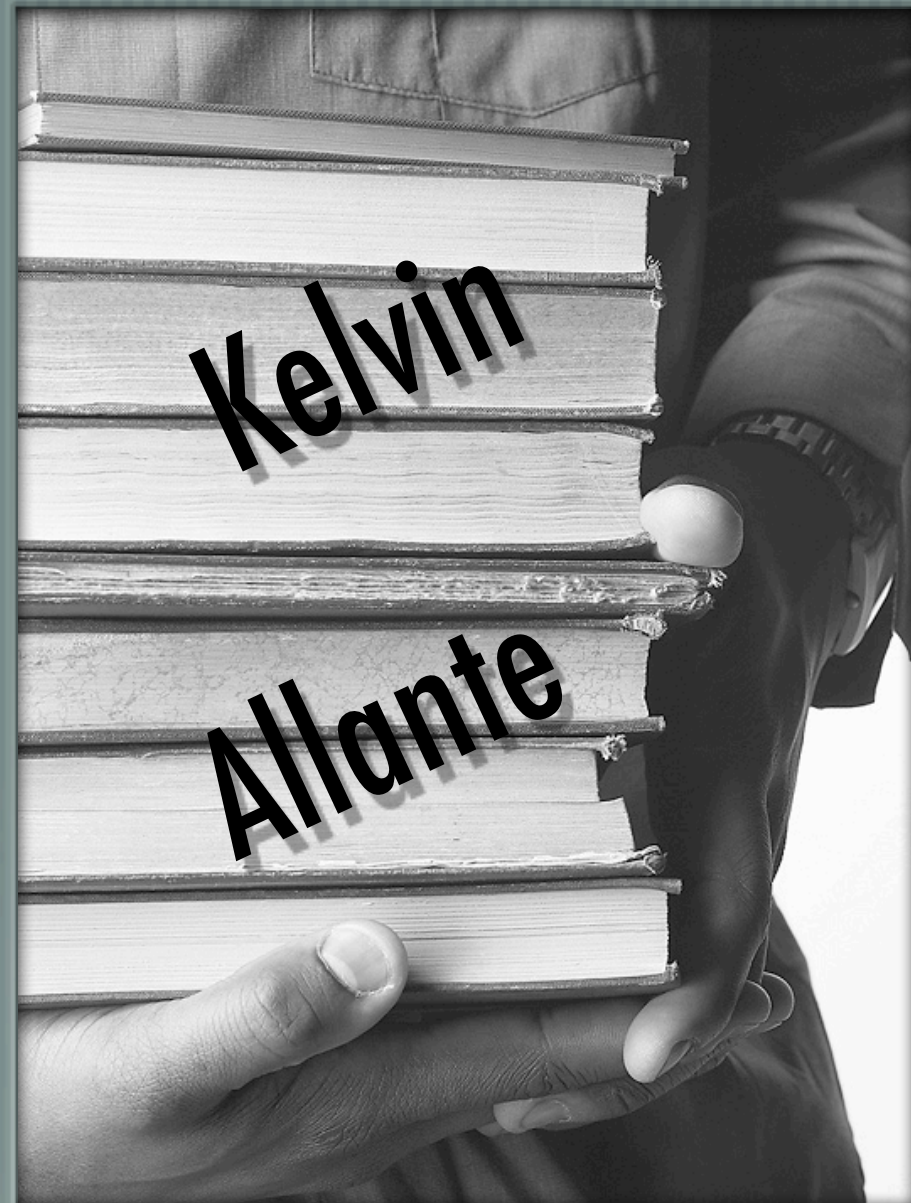
Voice

Connected



Meaningful

Connected



Voice



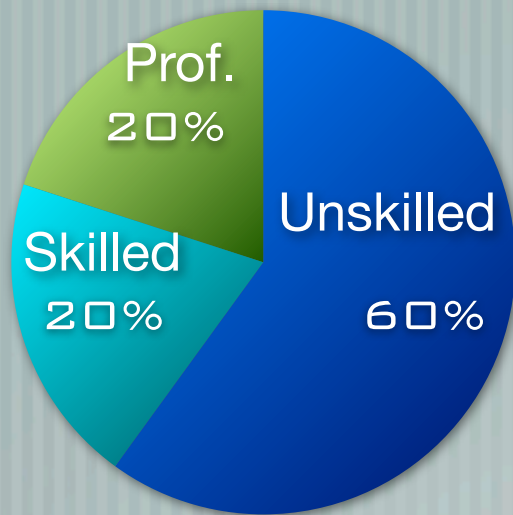
Resources

CHANGE

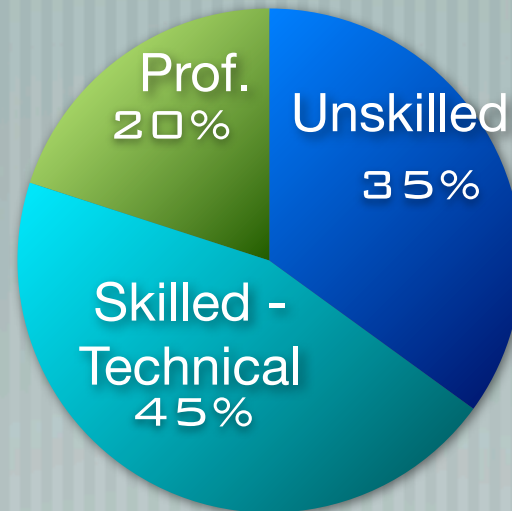


JOB SKILL CHANGES

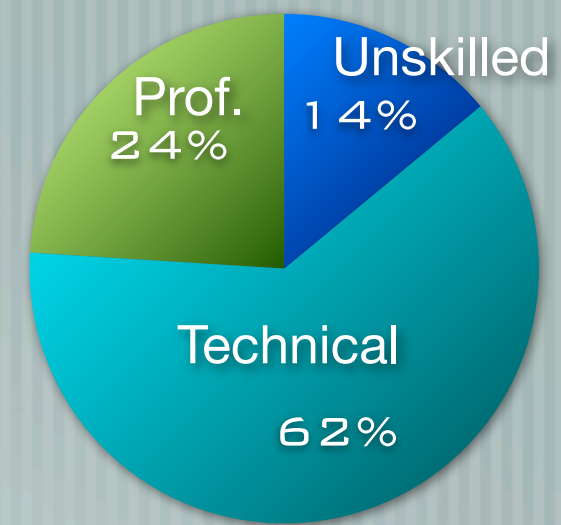
1950



1991



2005



Skilled-Technical:
Education beyond high school
or on-the-job training

Professional:
Bachelors Degree or above

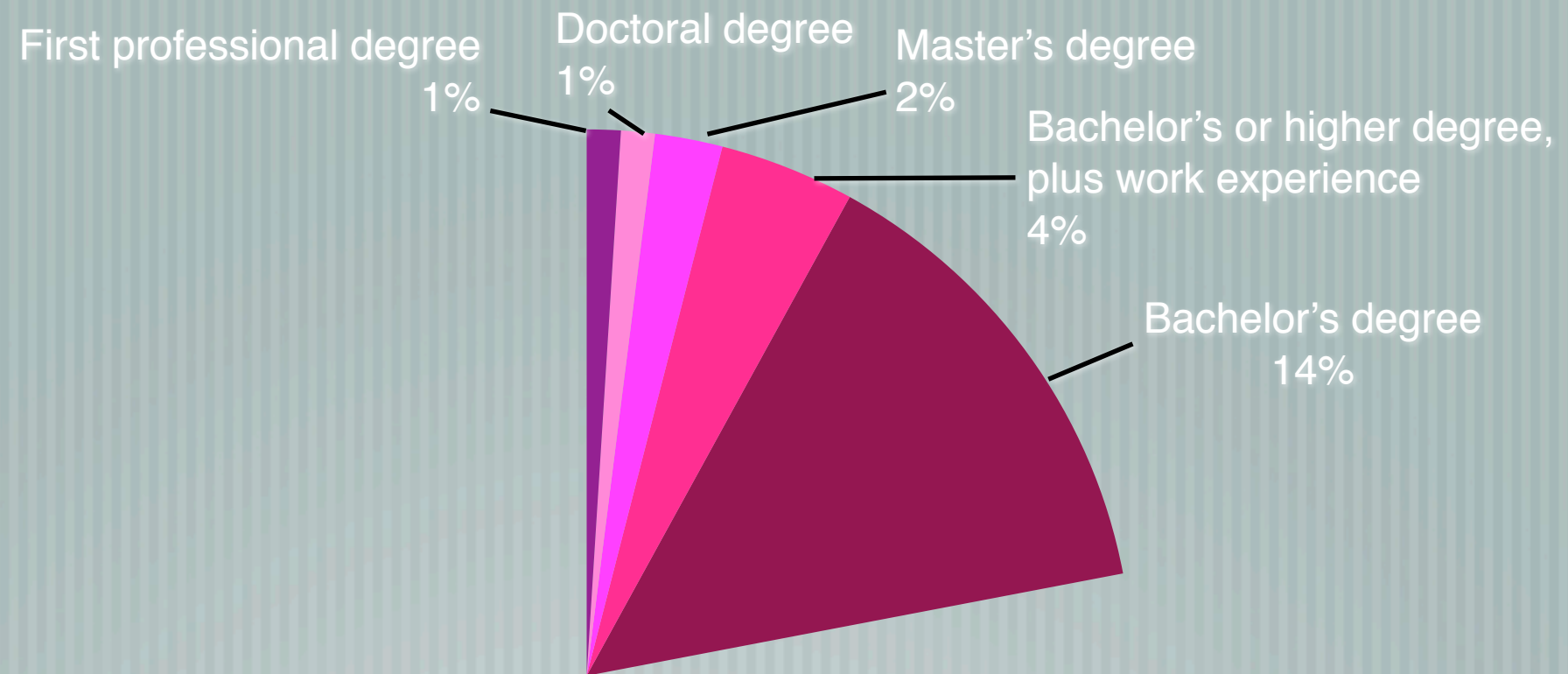
SOURCE:
U.S. DEPT. OF LABOR

Per-cent distribution of job openings due to job growth and replacement needs by education or training level projected 2008-2018

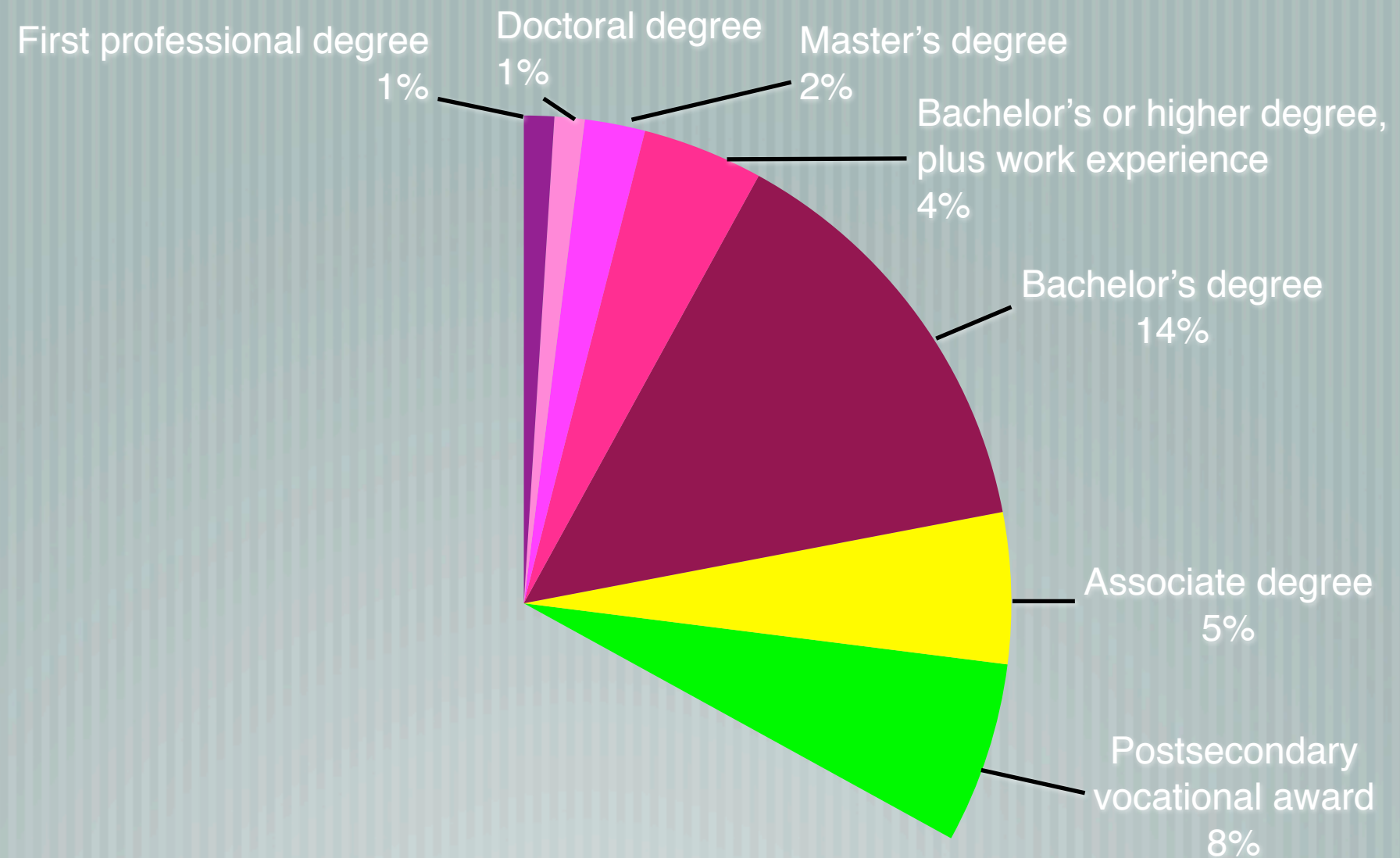


Occupational Outlook Quarterly
Winter 2009-10

Per-cent distribution of job openings due to job growth and replacement needs by education or training level projected 2008-2018

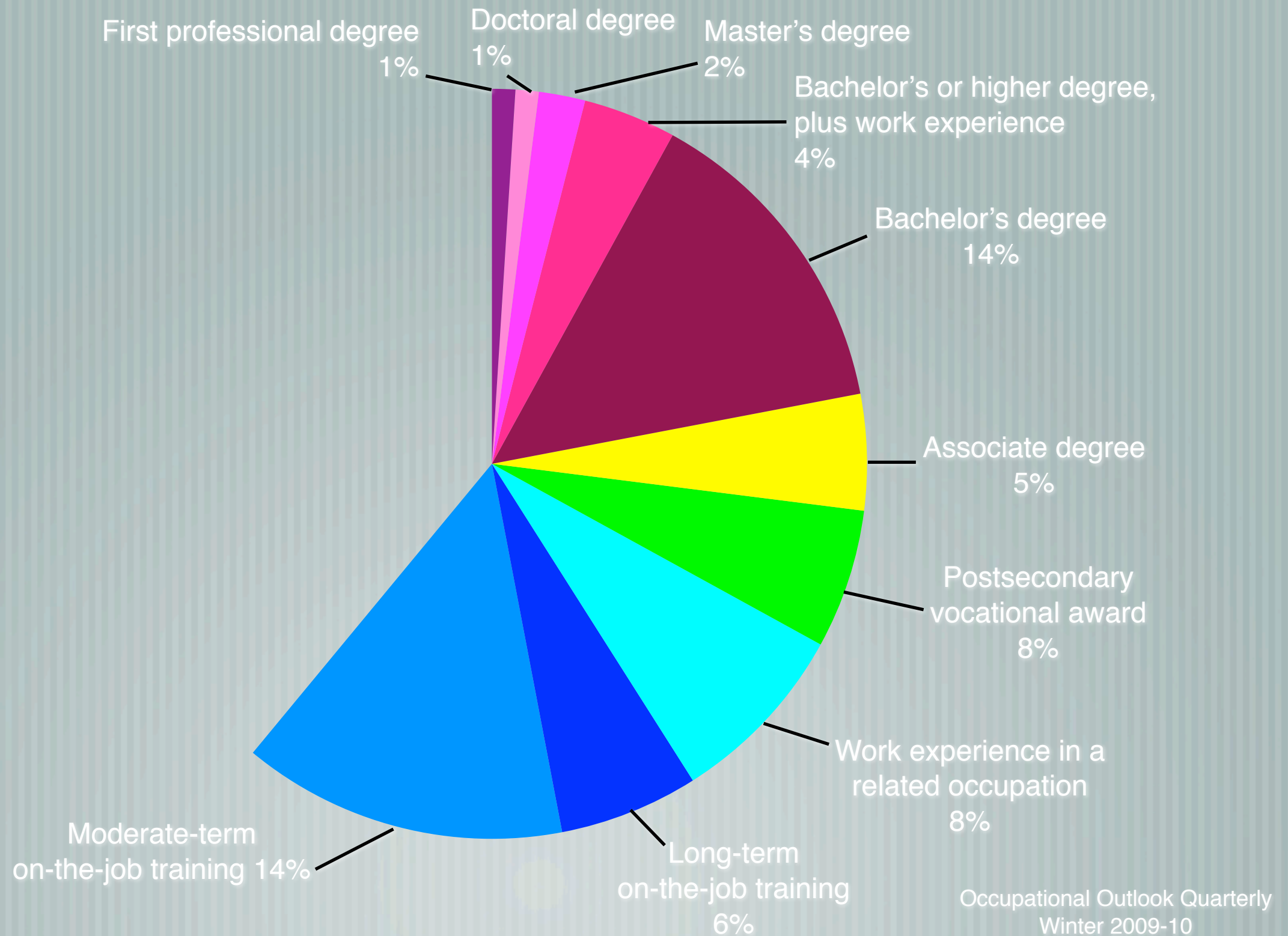


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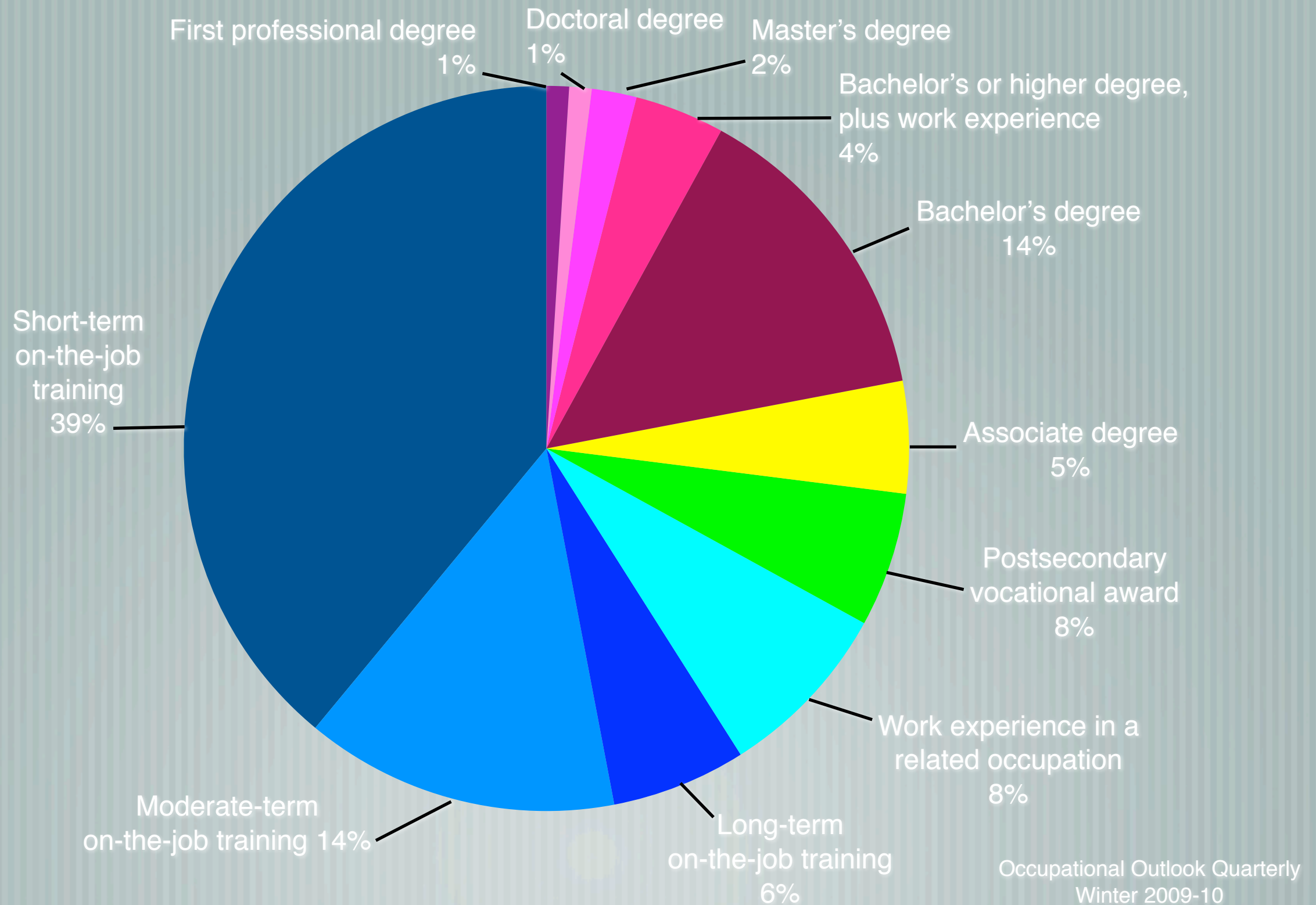


Occupational Outlook Quarterly
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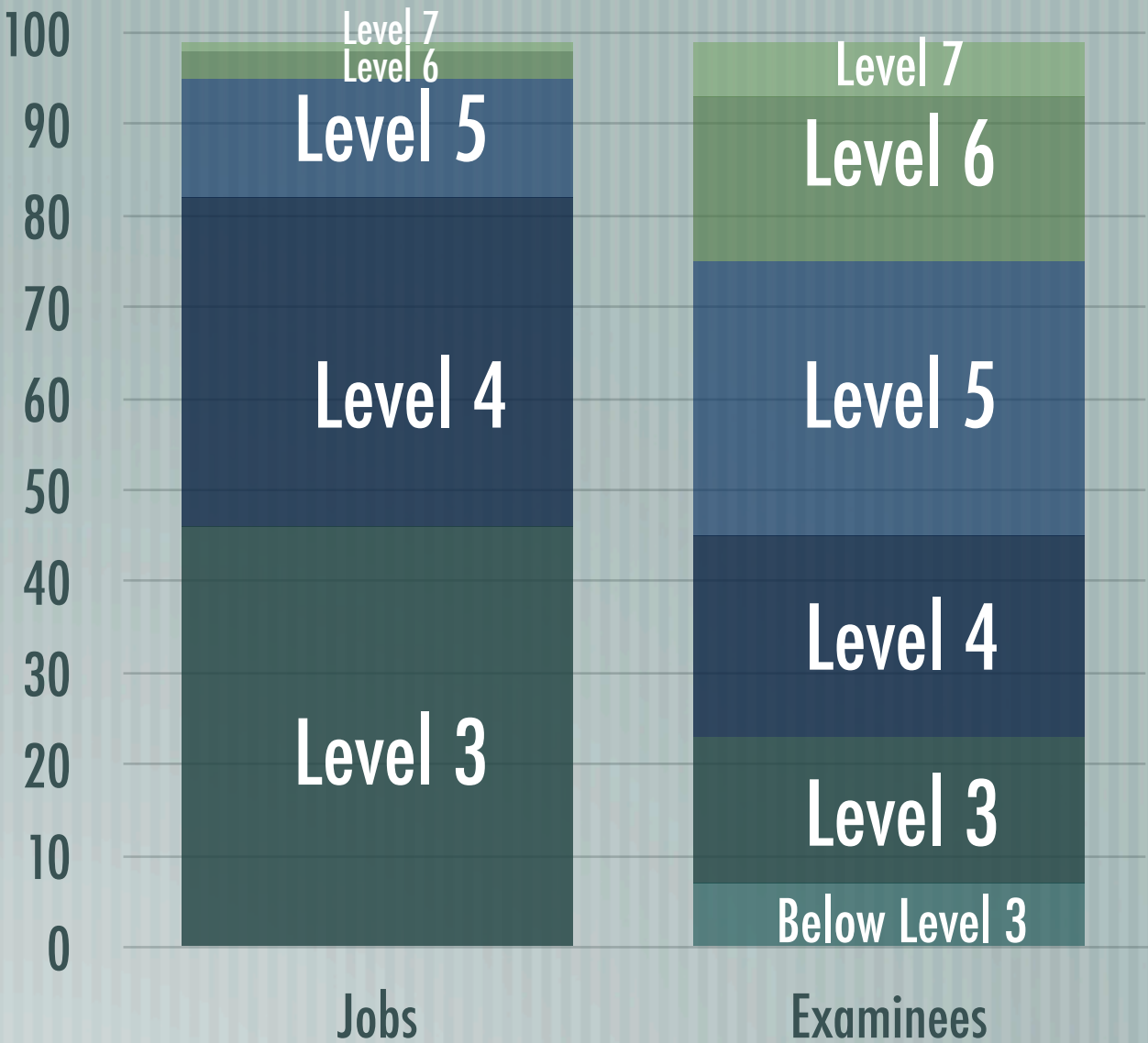
Applied Mathematics



WorkKeys Assessment ACT

Level 5 to 7 =17%
Level 3 to 6 =98%

Level 5 to 7 =54%
Level 3 to 6 =86%



Job Skills-Applied Math

Education Administrator K-12	5
Education Administrator Post-secondary	4
Electrical Engineer	5
Plumber	4
Accountant	6
Graphic Designer	5
Computer Programmer	5
Cook, Restaurant	4
Machinest	4
Fast Food Server	3
Network Systems Analyst	6

“We all know that many people with jobs that require a BA (e.g., teachers, social workers, etc.) are paid less than some people with jobs that require an AA (e.g., computer specialist, engineering technicians, mechanics, heating/air conditioning repairers, dental and medical assistants, insurance appraisers, and funeral directors). Moreover, there are indications that the BA payoff has declined in recent years.”

James E. Rosenbaum
Northwestern University

PATHWAYS TO PROSPERITY



MEETING THE CHALLENGE OF
PREPARING YOUNG AMERICANS
FOR THE 21ST CENTURY



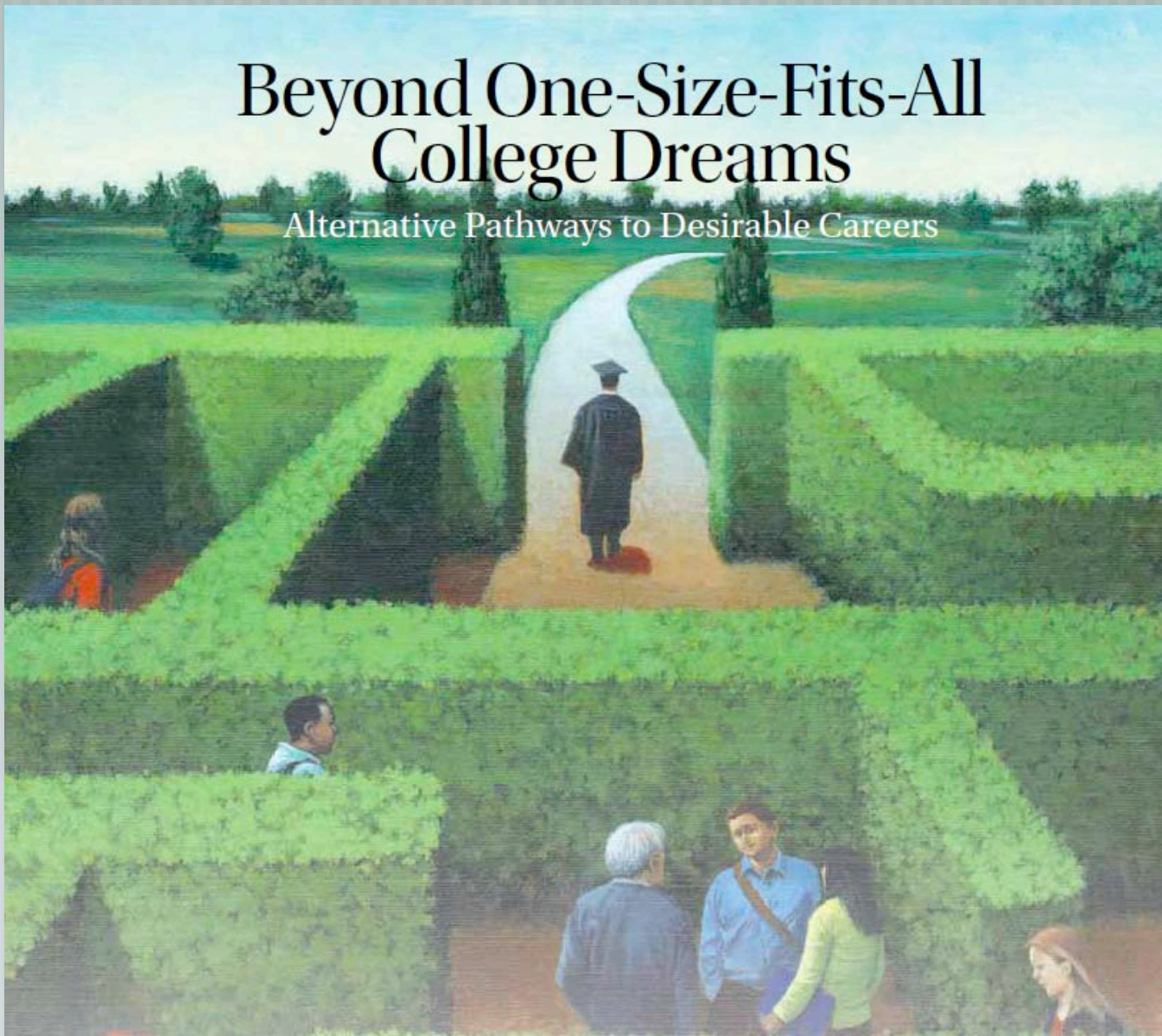
PATHWAYS TO PROSPERITY PROJECT

HARVARD
GRADUATE SCHOOL OF EDUCATION

FEBRUARY 2011

“27 percent of people with post-secondary licenses or certificates—credentials short of an associate’s degree—earn more than the average bachelor’s degree recipient.”

Pathways to Prosperity
Harvard Graduate School of Education



Beyond One-Size-Fits-All
College Dreams
Alternative Pathways to Desirable Careers

CAREER CLUSTERS FRAMEWORK

Government & Public Administration
Governance
National Security
Foreign Service
Planning
Revenue & Taxation
Regulation
Public Management & Administration

Business Management & Administration
General Management
Business Information Management
Human Resources Management
Operations Management
Administrative Support

Information Technology
Network Systems
Information Support & Services
Web & Digital Communications
Programming & Software Development

Finance
Securities & Investments
Banking Services
Business Finance
Accounting
Insurance

Marketing
Marketing Management
Professional Sales
Merchandising
Marketing Communications
Marketing Research

Law, Public Safety, Corrections & Security
Correction Services
Emergency & Fire Management Services
Security & Protective Services
Law Enforcement Services
Legal Services

Transportation, Distribution & Logistics
Transportation Operations
Logistics Planning & Management Services
Warehousing & Distribution Center Operations
Facility & Mobile Equipment Maintenance
Transportation Systems/Infrastructure
Planning, Management & Regulation
Health, Safety & Environmental Management
Sales & Service

Science, Technology, Engineering & Mathematics
Engineering & Technology
Science & Math

Manufacturing
Production
Manufacturing Production Process Development
Maintenance, Installation & Repair
Quality Assurance
Logistics & Inventory Control
Health, Safety & Environmental Assurance

Architecture & Construction
Design/Pre-Construction
Construction
Maintenance/Operations

Arts, Audio/Video Technology & Communications
Audio and Video Technology & Film
Printing Technology
Journalism & Broadcasting
Telecommunications
Performing Arts
Visual Arts

Human Services
Early Childhood Development & Services
Counseling & Mental Health Services
Family & Community Services
Personal Care Services
Consumer Services

Hospitality & Tourism
Restaurants & Food/Beverage Services
Lodging
Travel & Tourism
Recreation, Amusements & Attractions

Education & Training
Administration & Administrative Support
Professional Support Services
Teaching/Training

Business, Marketing and Computer Education

Technology and Engineering Education

Family and Consumer Sciences

Health Sciences Technology

Agricultural Education

3 Agriculture, Food & Natural Resources
Food Products & Processing Systems
Plant Systems
Animal Systems
Power, Structural & Technical Systems
Natural Resources Systems
Environmental Service Systems
Agribusiness Systems

4

1
Essential Knowledge and Skills

2

Health Science
Diagnostic Services
Support Services
Health Informatics
Therapeutic Services
Biotechnology Research & Development

Career Cluster Framework
1 Essential Knowledge and Skills
2 CTE Areas: Secondary (5)
3 Career Clusters (16)
4 Career Pathways (79)

June 8, 2009
<http://www.careerclusters.org>



CAREER CLUSTERS FRAMEWORK

Government & Public Administration

Governance
National Security
Foreign Service
Planning
Revenue & Taxation
Regulation
Public Management & Administration

Business Management & Administration

General Management
Business Information Management
Human Resources Management
Operations Management
Administrative Support

Marketing

Marketing
Management
Professional Sales
Merchandising
Marketing Communications
Marketing Research

Information Technology

Network Systems
Information Support & Services
Web & Digital Communications
Programming & Software Development

Finance

Securities & Investments
Banking Services
Business Finance
Accounting
Insurance

Law, Public Safety, Corrections & Security

Correction Services
Emergency & Fire Management Services
Security & Protective Services
Law Enforcement Services
Legal Services

Transportation, Distribution & Logistics

Transportation Operations
Logistics Planning & Management Services
Warehousing & Distribution Center Operations
Facility & Mobile Equipment Maintenance
Transportation Systems/Infrastructure
Planning, Management & Regulation
Health, Safety & Environmental Management
Sales & Service

Manufacturing

Production
Manufacturing Production Process Development
Maintenance, Installation & Repair
Quality Assurance
Logistics & Inventory Control
Health, Safety & Environmental Assurance

Architecture & Construction

Design/Pre-Construction
Construction
Maintenance/Operations

Arts, Audio/Video Technology & Communications

Audio and Video Technology & Film
Printing Technology
Journalism & Broadcasting
Telecommunications
Performing Arts
Visual Arts

Science, Technology, Engineering & Mathematics

Engineering & Technology
Science & Math

Agriculture, Food & Natural Resources

Food Products & Processing Systems
Plant Systems
Animal Systems
Power, Structural & Technical Systems
Natural Resources Systems
Environmental Service Systems
Agribusiness Systems

1 Essential Knowledge and Skills

Business, Marketing and Computer Education

Technology and Engineering Education

Family and Consumer Sciences

Health Sciences Technology

Health Science

Diagnostic Services
Support Services
Health Informatics
Therapeutic Services
Biotechnology Research & Development

Human Services

Early Childhood Development & Services
Counseling & Mental Health Services
Family & Community Services
Personal Care Services
Consumer Services

Education & Training

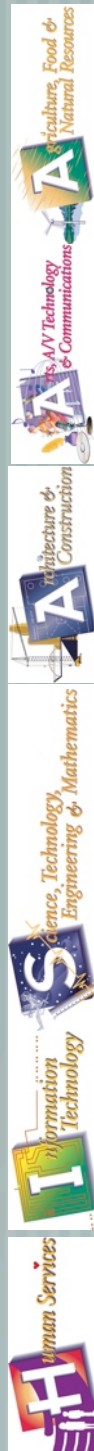
Administration & Administrative Support
Professional School Services
Teaching/Training

Career Cluster Framework

- 1 Essential Knowledge and Skills
- 2 STE, Years: Secondary (5)
- 3 Career Clusters (16)
- 4 Career Pathways (79)

June 8, 2009

<http://www.careerclusters.org>



Essential Questions

- [What does the workplace look like?
- [What skills are necessary for success in the business?
- [What specific math or reading skills are required?
- [What are the “real-world” technologies that are used?
How are they used?
- [What employability skills are critical?

- [How do people interact?
- [What education or training is required in specific jobs?
- [What are the career pathways to enter a specific business or industry?
- [What is your career pathway?

Business, Marketing, Govt.



Specialization



Skill
Transfer



Cross Disciplinary



Transportation - Nestle



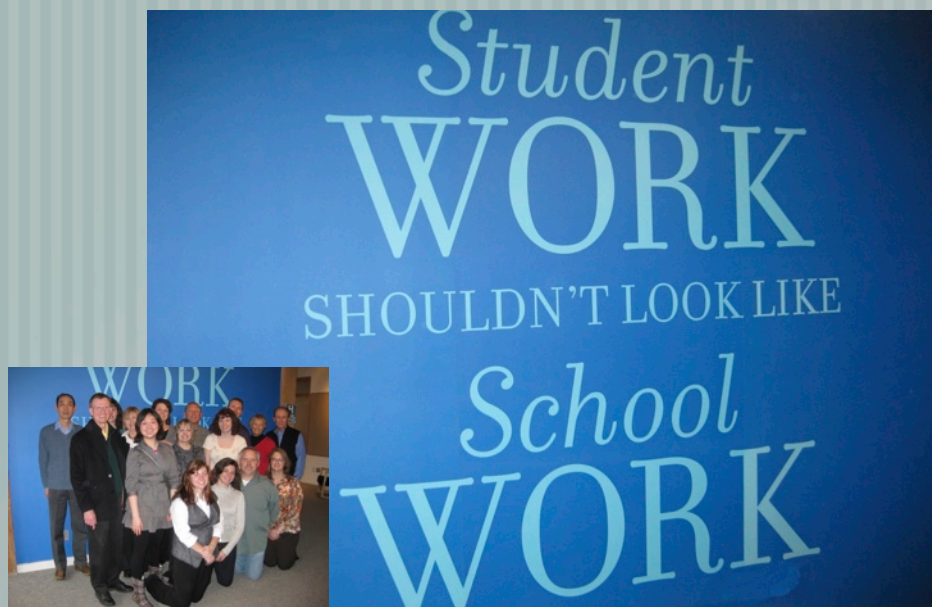
Entertainment



Architecture



Graphic Communication



Chicago Portfolio School



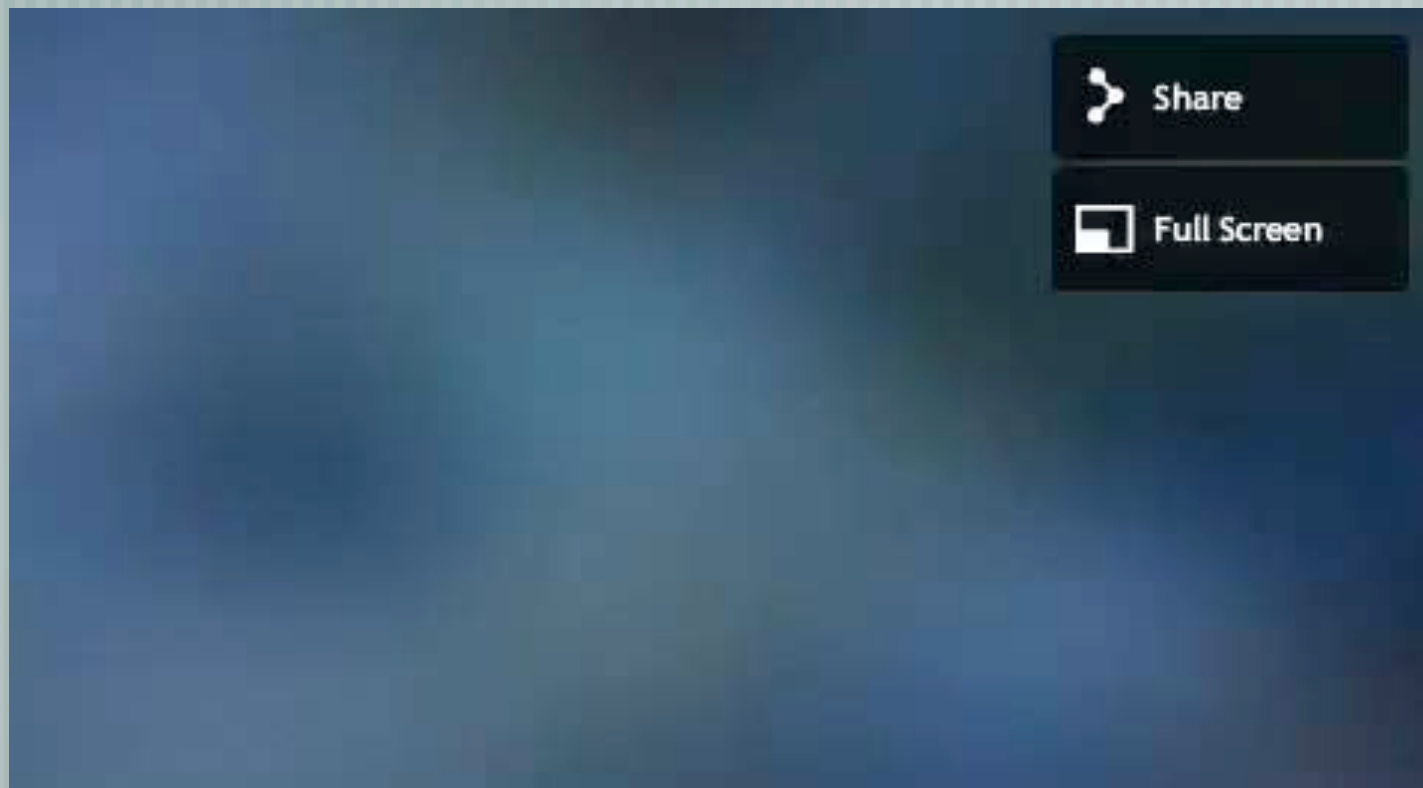
Critical Mass

Public Service



Criminal Justice
Sociology Psychology
Communication Skills
Foreign Language

Manufacturing



Making it happen...

- Establish the framework

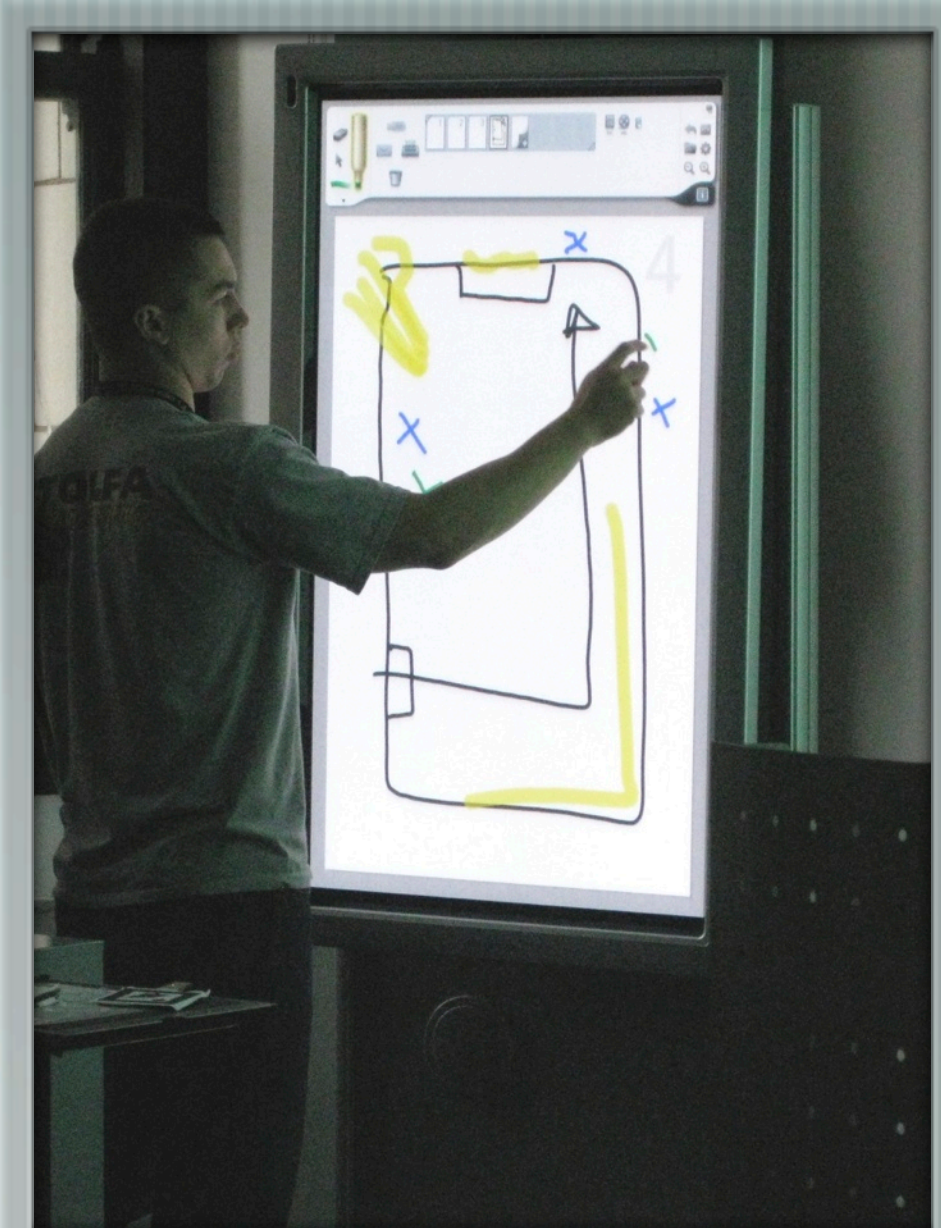
- Align with the curriculum
(integrated curriculum)

- Network and research

- Plan ahead - logistics

- Debrief

- Apply to program development
and instructional practice



Virtual Field-Trip



Why?

Connecting...
Head, Heart, and Hands



- [College Readiness
- [Career Readiness
- [Employability Skills

REFLECTING

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OWNING YOUR PASSION

Models of Prof. Development

— [**Individual Guided Development:** *identifying areas of interest the teacher sees as important to address personally*

— [**Observation and Assessment:** *including career readiness elements in lesson planning*

— [**Involvement in a School Improvement Process:** *gap analysis across the curriculum to identify appropriate ways to incorporate career readiness*

— [**Training:** *technical skill development*

— [**Inquiry:** *developing an organizational culture that continually asks questions about relevance*

Models of Prof. Development

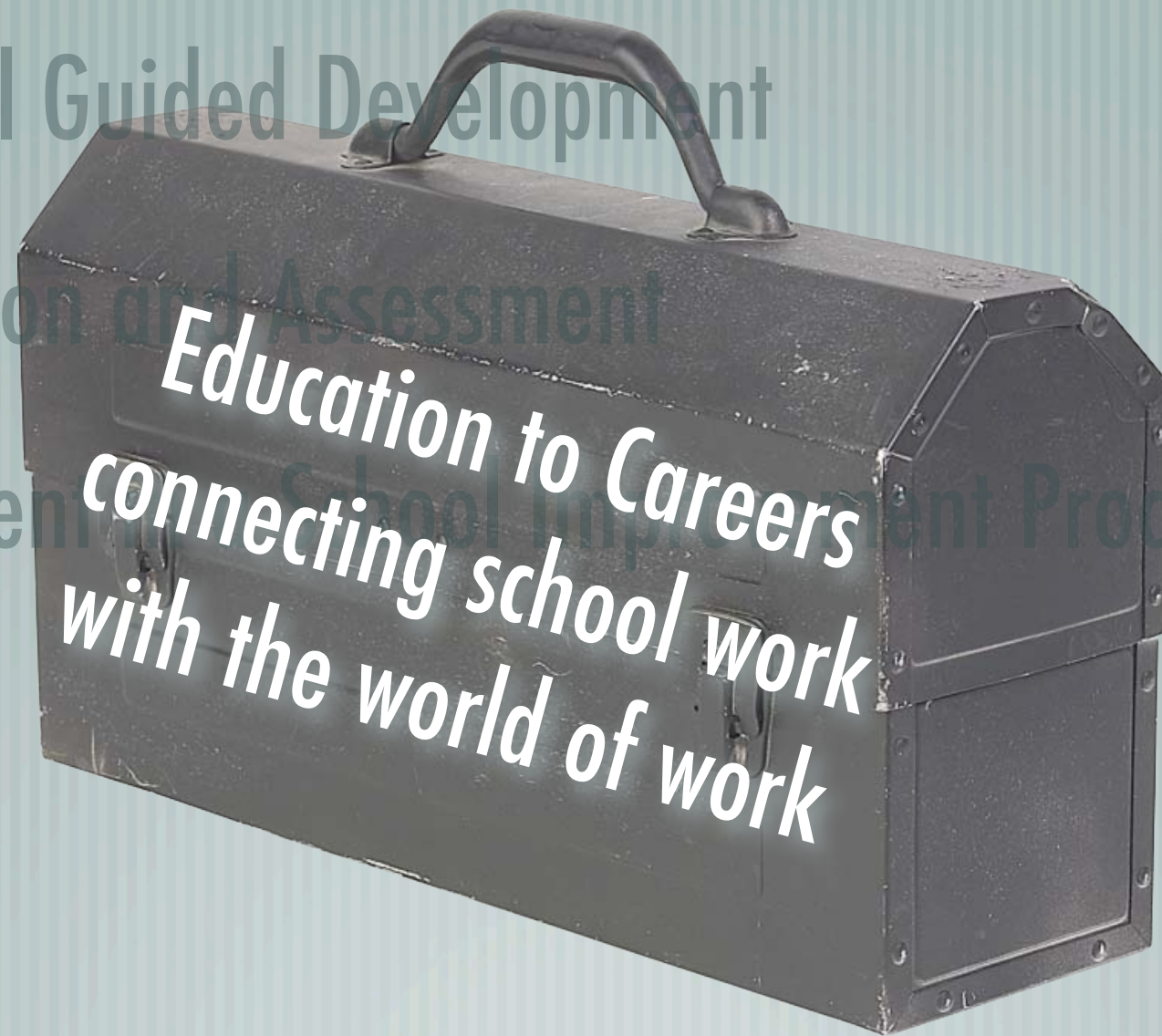
Individual Guided Development

Observation and Assessment

Involvement in School Improvement Process

Training

Inquiry



Career Pathways

For each individual there is a moment of discovery - finding a pathway to discover our passion and an understanding of who we are.

Explore the possibilities

- [How might the concept of a career readiness context fit with existing professional development initiatives?
- [What concepts or elements would be new ideas in relation to current initiatives and procedures?
- [Using a universal framework for prof. development, how might the idea of incorporating career readiness align with your institution?
 - Individual Guided Development
 - Observation and Assessment
 - Involvement in a School Improvement Process
 - Training
 - Inquiry