The Quality of Middle-skill Jobs and the Role of Community Colleges

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Context

- Need to get more workers into jobs at better wages
- Single worker needs to earn $30,012 according to report from Wider Opportunities, as reported in NYT on 3/31/11; as we will see, many middle-skill jobs fail to meet this criterion of just supporting a single person
- National goal of promoting credential attainment
- 2 ways to get into good jobs:
  - Get a BA to get a “high-skill” job
  - Get subbaccalaureate credential to get a “middle-skill” job
Middle-Skill Jobs

• Much discussion of middle-skill jobs because they are viewed as:
  – A large and growing portion of the labor market
  – Providing opportunities to get good jobs without a BA

• Defining a good job – both in terms of wage and career advancement opportunities

• We will not address debates on relative numbers of low, middle, and high skill jobs available; rather, it is clear that middle-skill jobs are a big part of the story
Outline of Presentation

• Defining middle-skill jobs
  – How many are there?
  – What is the job quality?

• Examining the community college role in preparing for these jobs
  – What kinds of programs exist?
  – For what kinds of jobs do these programs prepare people?
Middle-Skill Jobs
BLS 6-digit Occupational Categorization, By Education and Training

- Short-term OJT
- Moderate-term OJT
- Long-term OJT
- Work Experience in a Related Occupation
- Postsecondary vocational award
- Associate degree
- Bachelor’s degree
- Bachelor’s degree or higher plus work experience
- Master’s degree
- Doctoral degree
- First professional degree
Composition of Job Openings by Skill Level, 2008-2018

- High Skill: 23%
- Middle Skill: 38%
- Low Skill: 39%
Composition of Job Openings, By Education and Training

- High-skill
  - First professional degree
  - Doctoral degree
  - Master's degree
  - Bachelor's or higher degree, plus work experience
- Middle-skill
  - Bachelor's degree
  - Associate degree
  - Postsecondary vocational award
  - Work experience in a related occupation
  - Long-term on-the-job training
  - Moderate-term on-the-job training
  - Short-term on-the-job training
- Low-skill
  - First professional degree
  - Doctoral degree
  - Master's degree
  - Bachelor's degree
  - Associate degree
  - Postsecondary vocational award
  - Work experience in a related occupation
  - Long-term on-the-job training
  - Moderate-term on-the-job training
  - Short-term on-the-job training
Composition of Middle-skill Job Openings, By Education and Training

- Associate degree: 12%
- Postsecondary vocational award: 15%
- Work experience in a related occupation: 21%
- Long-term on-the-job training: 16%
- Moderate-term on-the-job training: 36%
Wage distributions, by skill group

Middle-skill jobs

Low-skill jobs

High-skill jobs
Wage Variability Within Middle-skill Occupations

• Some examples of annual earnings:
  – Air traffic controllers, $111,870
  – Computer specialists, $75,150
  – Loan officers, $54,700
  – Postal clerks, $51,040
  – Restaurant cooks, $21,990
  – Laundry and dry cleaning workers, $19,010
  – Food preparation and serving workers, $16,430
The Role of Community College Programs
Exploring the Top 50 Middle-skill Occupations

• Using the BLS’ Occupational Outlook Handbook (OOH), we examined in more detail these 50 occupations (as determined by the number of projected openings from 2008-18)
• 35 had community college programs, including associate degrees, certificates, and short-term training programs
• 10 of the 11 occupations that have licensure have a community college program
• 24 of the 33 occupations with industry certification have a community college program
Top 50 Occupations With and Without Community College Credentials

**With Community College Credentials:**
- Registered Nurse
- Bookkeeper
- Sales Worker Supervisor
- Nursing Aide
- Executive Secretary
- Licensed Practical Nurse
- Secretary
- Maintenance and Repair Worker
- Construction Laborer
- Carpenter
- Electrician
- Computer Support Specialist
- Police
- Medical Assistant
- Medical Secretary
- Pharmacy Technician
- Automotive Service Technician
- Preschool Teacher
- … plus 17 more

**Without Community College Credentials**
- Restaurant Cook
- Team Assembler
- Hairdresser
- Correctional Officers
- Cook, Institutional or Cafeteria
- Self-enrichment education teachers
- Purchasing agents
- Operating engineers
- Bus drivers
- Coaches and scouts
- Parts Salespersons
- Inspectors, Testers, Sorters, etc.

Occupations in blue have certification or licensure
Advancement and Wages

- Using the OOH, we determined advancement opportunities for the top 50 occupations
  - Only six of these occupations have “limited” possibilities for advancement
  - 18 have an associated educational credential that can help with advancement, and 16 of these have community college programs for entry
- Occupations with community college programs have higher wages ($35,100) than those without community college programs ($29,860)
Occupations with a Credential-Based Pathway to Advancement

1. Registered Nurse
2. Customer Service Representative
3. Bookkeeper
4. Medical Assistant
5. Licensed Vocational Nurse
6. Sales Worker Supervisor
7. Preschool Teacher
8. Electrician
9. Social and Human Service Assistant
10. Computer Support Specialist
11. Fitness Trainer or Aerobics Instructor
12. Dental Hygienist
13. Fire Fighter
14. Police Officer
15. Legal Secretary
16. Correctional Officer
17. Supervisor of Non-Retail Sales Workers
18. Welding, Soldering, and/or Brazing Worker

- Largest number of CC CTE associate degrees in health care (grew by 25%)
- Second largest number of CC CTE associate degrees in business management (declined by 4% vs. 18% increase for all institutions)
- Third highest was engineering and science technology (declined by 3% vs. 15% for all institutions)
- Fourth was protective services (grew by 18%, vs. 48% for all institutions)
- Rapid growth of CC CTE associate degrees in communications and design (31%), CIS (95%, yet 37% decline from peak) and education (40%)
Associate degrees by career-technical field, 2-year public institutions

Number of degrees awarded

Year


Agriculture and natural resources
Business management
Business support
Communications and design
Computer and information sciences
Consumer services
Education
Engineering, architecture and science technologies
Health Sciences
Marketing
Protective services
Public, legal, and social services
Manufacturing, construction, repair, and transportation

- Largest number of CC CTE certificates in health care (grew by > 50%)
- Second largest number of CC CTE certificates in manufacturing, repair, construction and transport (grew by 44%)
- Rapid growth of CC CTE certificates in consumer services (55%), education (249%), protective services (39%) and public, legal and social services (43%)
- CC certificates in engineering and science technologies grew by 13% (vs. decline of 22% among all institutions)
- Drop in CC CTE certificates in business management (17%) and CIS (16%)
Implications for Community Colleges in Preparing Students for Middle-skill Jobs

• Middle-skill jobs comprise a large share of projected job openings
• There are over 400 middle-skill occupations
• Much variation among occupations in the number of openings, job quality in terms of wages and advancement opportunities, and the type of education and training necessary
• Some of this variation is due to institutional factors such as unionization, public/private sector status, firm size, etc.
• This gives community colleges the ability to think strategically about how to allocate resources among workforce programs
Issues for Community Colleges

• Should they focus both on high paying jobs, as well as highest paying careers?

• Career pathways to provide ways for advancement
  – Development of “stackable” credentials (not much of a reality now)
  – Articulation of non-credit programs with credit programs: convert non-credit to credit through exams or other means?

• Labor market engagement
  – Develop ways to be more responsive to the local labor market, particularly in emerging fields
  – Provide more information to students on jobs available
For more information:

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