



Exploring a Skills-Based Approach to Occupational Mobility

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Disclaimer

The views expressed here are those of the presenter and do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.



The labor market offers some economic opportunity for noncollege workers



- Opportunity employment — defined as employment accessible to workers without a bachelor's degree and typically paying above the national annual median wage — accounts for 21.6 percent of total employment.
- Some of the largest opportunity occupations, including a number in healthcare and the skilled trades, are expected to experience above-average growth in the coming years.



Findings for the Kansas City metro area



- Kansas City's level of opportunity employment ranked 10th among the 121 metro areas we studied.
- While they do not typically require a bachelor's degree, many of these jobs require some type of postsecondary education, on-the-job training, or experience.
- Question: *Can we create pathways into these and other higher-wage jobs by leveraging workers' existing skill sets?*



Our guiding principles, data, and methods

Occupations Defined by Tasks and Skills

- An occupation can be thought of as a bundle of tasks, for which a worker needs a certain set of skills.
- Occupations differ in the types of skills they require and the frequency with which those skills are required.

Skills Described in Online Job Ads

- We analyzed nearly 60 million online job advertisements posted between 2014 and 2018.
- Our analysis covered the 33 metro areas with at least 1 million jobs.

Potential Transitions...

- Occur within and between lower-wage and opportunity occupations.
- Require at least a 10 percent pay increase but not a bachelor's degree.
- Involve destinations projected to remain stable or grow nationally between 2018 and 2028.

Top Transitions...

- Represent potential transitions with a similarity score greater than 0.75.

Skills can be viewed as a bridge rather than as a gap

- Overall, we find a high degree of similarity between the skills required for lower-wage occupations and the skills required for opportunity occupations.

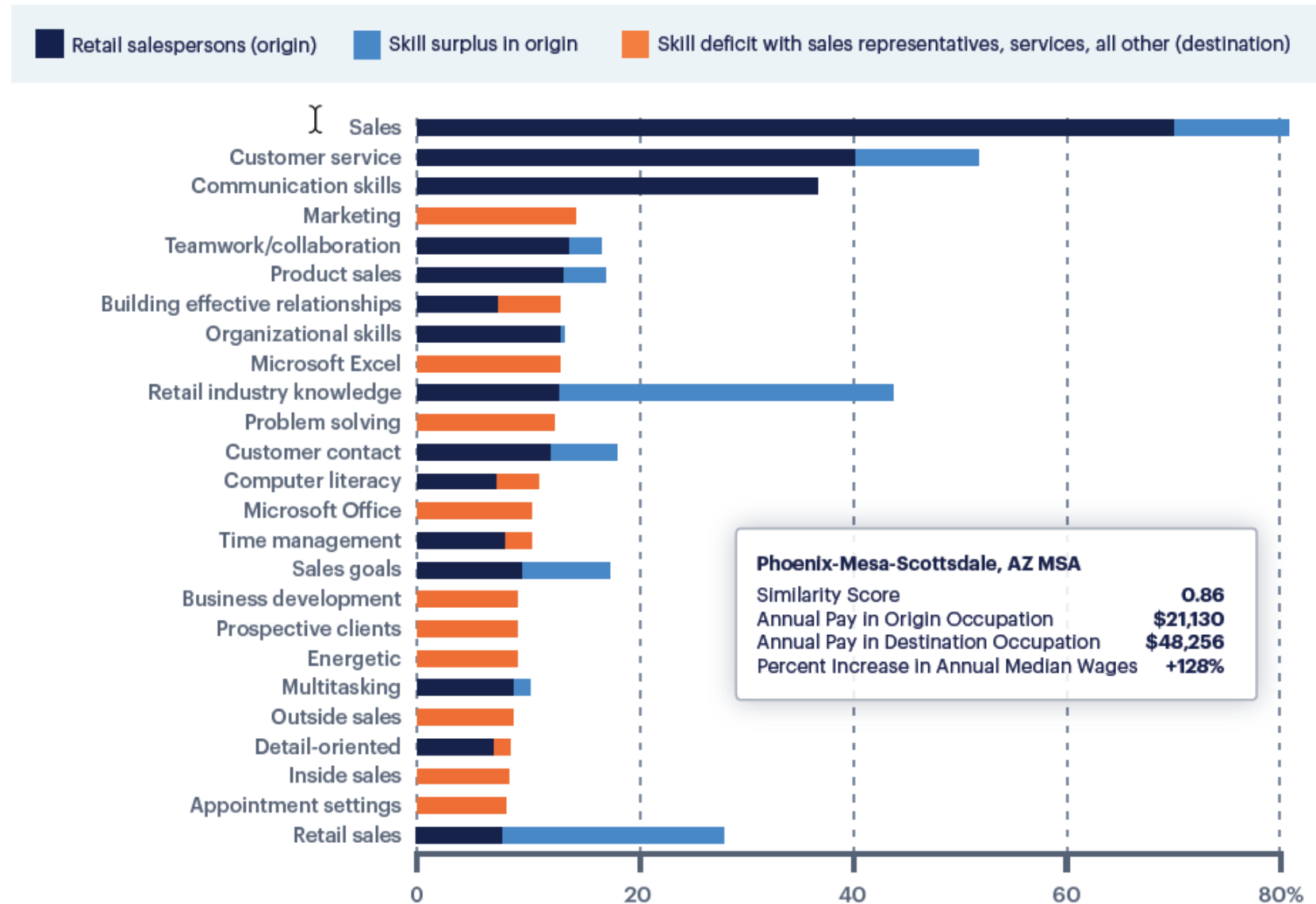
Skill	Overall intensity	Overall	Rank	
			Lower-wage occupations	Opportunity occupations
Communication skills	26.9%	1	1	1
Customer service	17.7%	2	2	3
Physical abilities	14.3%	3	3	8
Organizational skills	13.1%	4	4	4
Teamwork/collaboration	11.8%	5	9	10
Scheduling	10.9%	6	7	6
Detail-oriented	10.2%	7	8	13
Sales	9.9%	8	6	9
Microsoft Excel	9.4%	9	16	5
Computer literacy	9.3%	10	11	7
Problem solving	8.8%	11	18	11
Writing	8.7%	12	14	15
Repair	8.4%	13	13	2
English	8.0%	14	10	21
Microsoft Office	7.7%	15	23	12
Planning	7.7%	16	36	14
Cleaning	7.0%	17	5	54
Building effective relationships	6.7%	18	19	17
Teaching	6.4%	19	30	64
Research	6.1%	20	47	19

Note: Ranks ≤10 shaded dark orange; ranks >30 shaded light orange.

Source: DeMaria, Kyle, Kyle Fee, and Keith Wardrip. *Exploring a Skills-Based Approach to Occupational Mobility*. Federal Reserve Banks of Philadelphia and Cleveland, 2020.

Top transitions exist in every metro area

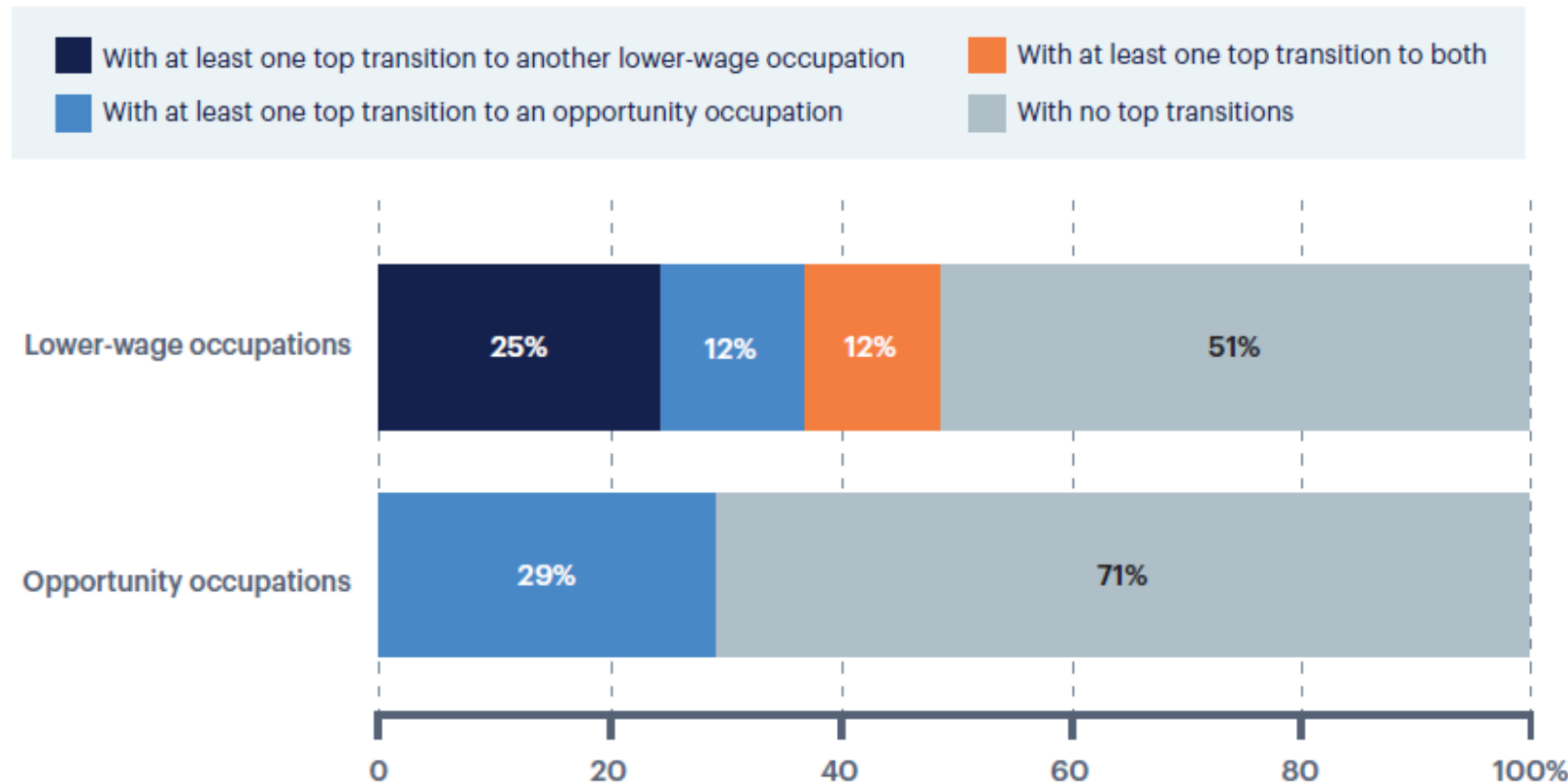
- In the 33 metro areas analyzed, we find 4,097 top transitions (similarity score >0.75).



Nearly half of lower-wage employment can be paired with a top transition

- The same is true for 29 percent of the jobs classified as opportunity occupations.

Share of Employment by Type of Top Transition



Top transitions can represent substantial wage gains

- Overall, top transitions would represent an increase in average annual median wages of 49%, from around \$30,000 to just under \$45,000.

Type of transition	AVERAGE ANNUAL MEDIAN WAGES			
	Origin occupations	Destination occupations	Increase	Percent increase
Lower-wage occupation to lower-wage occupation	\$21,508	\$28,367	\$6,859	32%
Lower-wage occupation to opportunity occupation	\$28,547	\$50,672	\$22,125	78%
Opportunity occupation to opportunity occupation	\$53,426	\$76,128	\$22,703	42%
Overall	\$30,100	\$44,974	\$14,873	49%



Kansas City's highest-scoring top transitions span the occupational landscape

Origin occupation	Origin annual median wages	Destination occupation	Destination annual median wages	Percent wage increase	Similarity score
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$59,509	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$72,446	22%	0.93
Installation, Maintenance, and Repair Workers, All Other	\$44,158	Industrial Machinery Mechanics	\$54,766	24%	0.91
Maintenance and Repair Workers, General	\$38,314	Installation, Maintenance, and Repair Workers, All Other	\$44,158	15%	0.91
Installation, Maintenance, and Repair Workers, All Other	\$44,158	Industrial Engineering Technicians	\$51,480	17%	0.90
Bill and Account Collectors	\$34,403	Credit Counselors	\$45,947	34%	0.89
Helpers--Installation, Maintenance, and Repair Workers	\$26,707	Maintenance and Repair Workers, General	\$38,314	43%	0.88
Sales Representatives, Services, All Other	\$59,093	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$72,446	23%	0.88
Electro-Mechanical Technicians	\$29,702	Electrical and Electronics Engineering Technicians	\$69,846	135%	0.87
Cooks, Short Order	\$17,436	Cooks, Restaurant	\$23,751	36%	0.87
Business Operations Specialists, All Other	\$76,170	Managers, All Other	\$109,699	44%	0.86

Source: Based on analysis conducted for DeMaria, Kyle, Kyle Fee, and Keith Wardrip. *Exploring a Skills-Based Approach to Occupational Mobility*. Federal Reserve Banks of Philadelphia and Cleveland, 2020.



Strategies to improve economic mobility and help meet the needs of employers

- Skills-based hiring practices could expand applicant pools to include workers who do not have a bachelor's degree – but who do have many of the skills required to do the job.
- Targeted training could provide otherwise qualified workers with the skills necessary to make a successful transition.
- Collaboration between employers, education providers, and workforce development organizations can ensure training meets local demand.



Example: Community College Growth Engine Fund

- Six community colleges are participating in this pilot launched by Education Design Lab.
- Philadelphia and Cleveland Feds are providing labor market data and research support.
- The goal is to produce 18 employer-validated micro-pathways that can be implemented in other communities.
- For more information:
<https://eddesignlab.org/project/growthenginefund/>.





Tool Demo: Occupational Mobility Explorer

- To follow along, go to philadelphiafed.org and search for “Occupational Mobility Explorer.”

The screenshot shows the website of the Federal Reserve Bank of Philadelphia. The header includes navigation links: About Us, Our People, Education, Banking, Careers, and Calendar of Events. Below this is a dark blue banner with the bank's logo and main menu items: THE ECONOMY, CONSUMER FINANCE, COMMUNITY DEVELOPMENT, and SURVEYS & DATA (highlighted with a yellow pulse icon). A breadcrumb trail reads: Federal Reserve Bank of Philadelphia > Surveys & Data > Community Development Data > Occupational Mobility Explorer.

Occupational Mobility Explorer

In *Exploring a Skills-Based Approach to Occupational Mobility*, researchers from the Philadelphia and Cleveland Feds analyze the skills that employers request in the 33 largest metro areas and look for opportunities for workers to transfer their skills from one occupation to a similar — but higher-paying — occupation in the same labor market. This application is designed to make the findings interactive and wholly accessible to those interested in economic mobility.

Below the introductory text is a navigation bar with four options: OCCUPATIONAL MOBILITY EXPLORER (underlined), BUILD YOUR PATH, COMPARE SKILLS, and VIEW TOP TRANSITIONS.

Build Your Path

See which occupations require similar skills and represent at least a 10% increase in wages

Compare Skills

Compare the 25 most in-demand skills for any pair of occupations in a metro

View Top Transitions

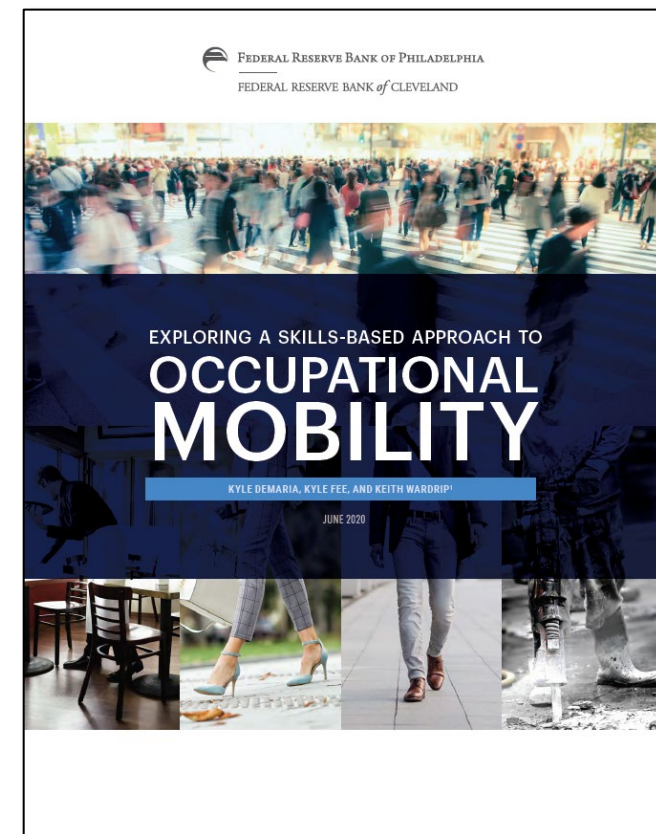
View, sort, and download data for pairs of occupations considered most similar

The background of the lower section features a blurred image of a busy city street with many pedestrians crossing a crosswalk.



Thank you

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<https://www.philadelphiafed.org/community-development/workforce-and-economic-development>



FEDERAL RESERVE BANK OF PHILADELPHIA

ECONOMIC
GROWTH &
MOBILITY
PROJECT



Digital Skills for the 21st-Century Workforce

Ashley Putnam

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Evening with the Fed: Career Exploration and Education

Thursday, January 14, 2021



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The **Economic Growth & Mobility Project (EGMP)** is a new initiative of the Federal Reserve Bank of Philadelphia dedicated to promoting **equal access to economic opportunity for all.**

Infrastructure Equity

*Transportation
Affordable Housing
Broadband*

Workforce Development

*Education
Barriers to Employment
Skill Development*

Job Creation

*Equitable Development
Entrepreneurship
Creating Quality Jobs*



Listening Sessions

Held during the
summer of 2018

Hosted at the Federal
Reserve Bank of
Philadelphia

Participants were
workforce development
and business leaders from
the Tech, Healthcare,
Manufacturing and
Finance sectors



Research Motivations

- Middle-skills jobs have increasingly required workers to cultivate a robust digital skillset.
- Research from Burning Glass Technologies has shown that about 8 in 10 middle-skills jobs now require a degree of digital proficiency.
- A need to think proactively about preparing incoming and incumbent workers for increasingly digitized occupations, especially in the face of automation

Challenges of a Changing Digital Skills Market



Digital Literacy *and* Industry Knowledge

- Employers need workers with both a robust digital skillset and sector-specific, contextualized knowledge around tech.
- Business acumen to execute tasks efficiently is as important as conceptual knowledge of a technology.

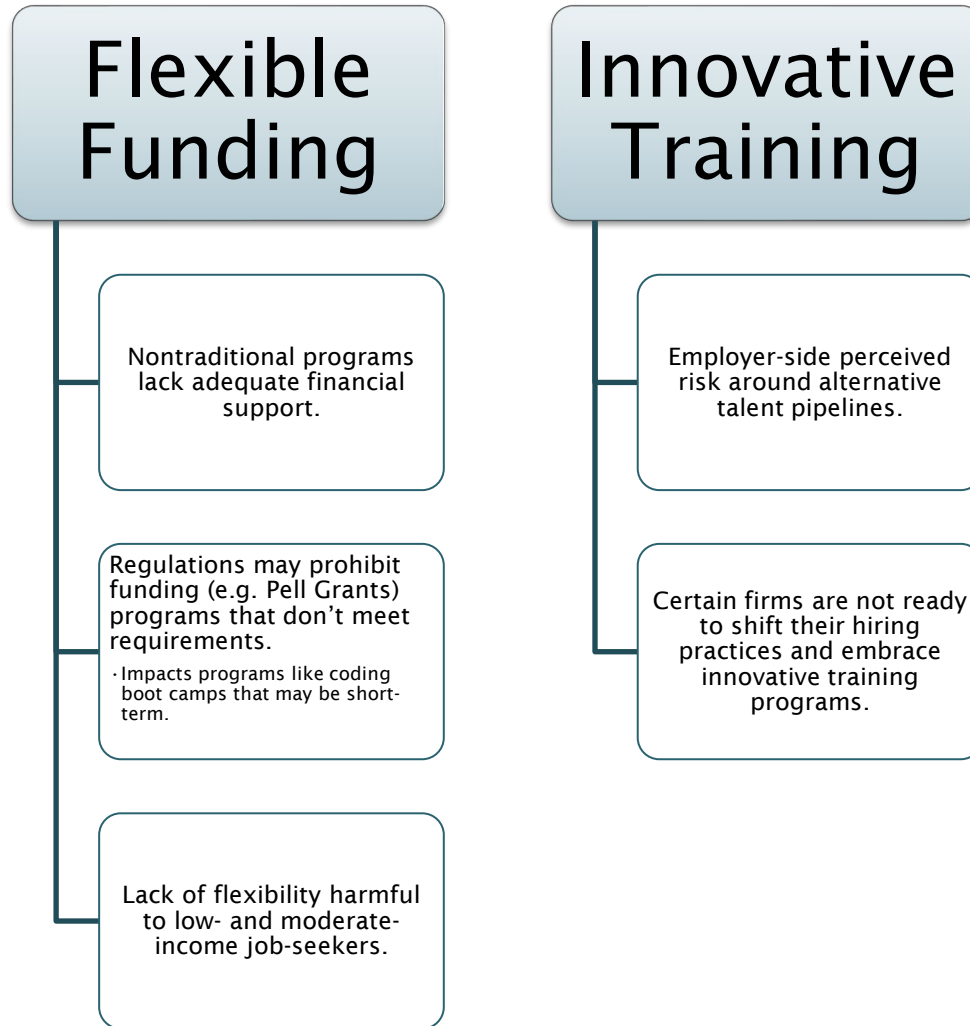


Lifelong Learners

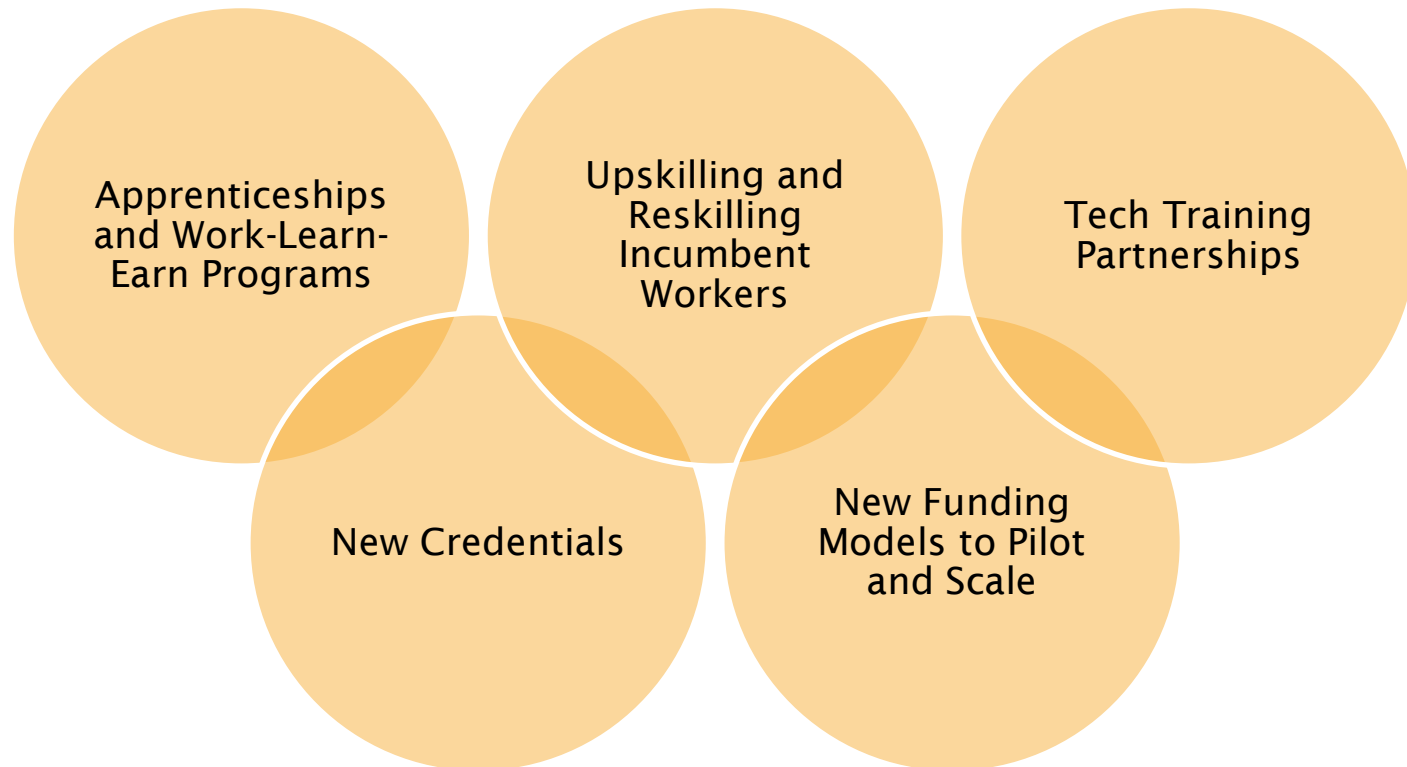
- Develop learning agility to maintain a dynamic and relevant skillset.
- De-emphasize specific tools, like coding, that can change quickly.
- Understand how innovative tech can be implemented within a company.

“The half-life for digital skills is much shorter than it used to be.”

Financial Limitations in Building Digital Skills



Opportunities to Invest in Digital Skills



Apprenticeships and Work-Learn-Earn Programs

- Promotes on-the-job learning without forgoing income.
- Experiential learning promotes a deeper understanding of a sector, while learning occupational tasks.
- Offsets financial barriers of training for low- and moderate-income workers.



New Credentials



- Identifying new credentials (e.g. CompTIA and Amazon Web Services) as viable options for upskilling and training.
- Shift hiring practices away from identifying “qualified” workers based on holding a four-year degree.
- Maintain feedback loops from employers to training providers on efficacy of emerging credentials.

Upskilling and Reskilling Incumbent Workers

- Employer-led solutions to develop workers within a company.
- Support workers financially to go back to school while working.
- Promote opportunities to learn new skills on the job.
- Develop career pathways that are individualized for each worker.



New Funding Models to Pilot and Scale

- Consider collaborative funding models, which pool capital from national and local philanthropy for like-minded firms.
- Promote intentional program implementation that meets the shared priorities of regional businesses.




Tech Training Partnerships to Break Down Siloes

- Partnerships within industries and between regional training providers to develop talent pipelines.
- Collaboration can take several forms, including leadership councils and streamlining information sharing of tech talent needs.



What can we do?

- 
- Continue identifying workforce development models to invest in digital skills, through the economic crisis.
 - Strengthen feedback loops between training providers and employers.
 - Shift organizational focus toward advancing innovative workforce development solutions.
 - Develop workforce development models that account for digital disruption.



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Thank You

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COMMUNITY DEVELOPMENT & REGIONAL OUTREACH



Career Education Resources

Presented by Gigi Wolf
January 2021



Career Education Resources

- **Lesson plan:** Skilled Trade Pays
- **Teaching Tips 2.0:** Opportunity occupations
- **Infographics:** workforce development topics
- **Videos:**
 - Fed Opportunity Occupations at the Fed
 - 21st Century Career Leaders

Federal Reserve Bank of Kansas City



Skilled Trade Pays Lesson

Overview: Students analyze charts and graphs detailing the scope of opportunity occupations within the United States and through video, meet real-life individuals working in these industries. Students then investigate a specific opportunity occupation and work collaboratively to construct a visual of what they learned to present to the class.

Concepts: Opportunity occupations, wages, labor market, human capital

Grade: 9-12

Time: Three class periods (55-60 minutes each) with additional work outside of class

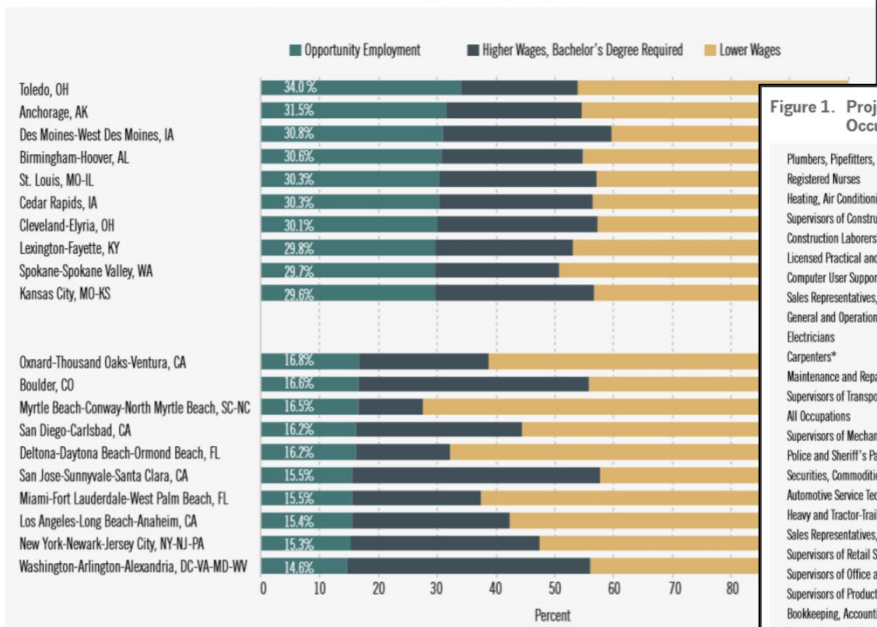


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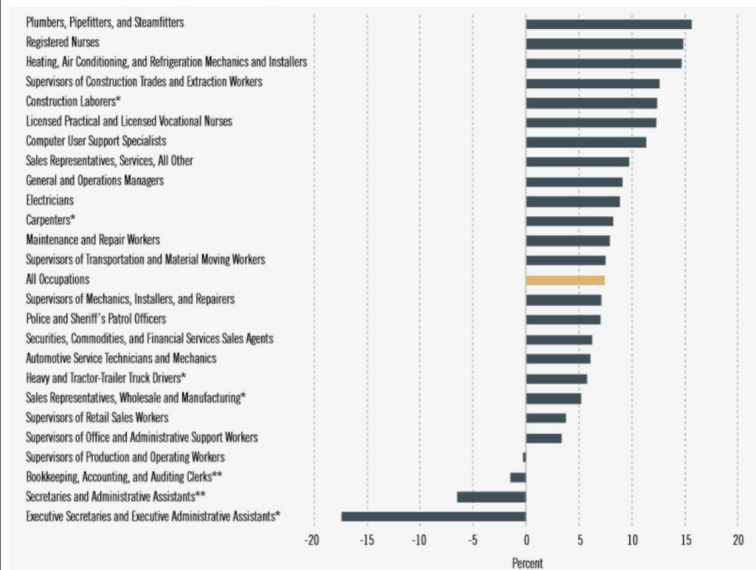
Skilled Trade Pays

Figure 6. Metro Areas with Highest and Lowest Opportunity Employment Shares (2017)



Sources: Authors' calculations using data from BLS Occupational Employment Statistics (May 2017), Burning Glass Technologies (2015-2017), BEA Regional Price Parities (2016), and American Community Survey Five-Year Public Use Microdata Sample (2012-2016)

Figure 1. Projected Percent Change in National Employment for the Largest Opportunity Occupations (2016-2026)



Note: Using probabilities provided in Frey and Osborne (2017), Ding, Leigh, and Harker (2018) consider occupations denoted with one asterisk (*) "at risk" of automation, with a likelihood of 70-94 percent, and occupations denoted with two asterisks (**) "high risk" of automation, with a likelihood of 95 percent or greater. The automation probability for sales representatives, services, all other was not available, and both the automation probability and the projected growth for supervisors of transportation and material moving workers represent the average of two constituent occupations.

Source: BLS Employment Projections (2016-2026)

Table 1. Largest Opportunity Occupations (2017)

Occupation Title	Opportunity Employment	Share of Sub-Baccalaureate Job Ads	Distribution of Total Occupational Employment		
			Opportunity Employment	Higher Wages, Bachelor's Degree Required	Lower Wages
Registered Nurses	1,374,014	65.9%	65.9%	34.1%	0.0%
Heavy and Tractor-Trailer Truck Drivers	1,032,790	100.0%	93.1%	0.0%	6.9%
Bookkeeping, Accounting, and Auditing Clerks	581,455	58.8%	52.8%	37.4%	9.8%
Maintenance and Repair Workers	491,285	100.0%	54.0%	0.0%	46.0%
Carpenters	457,460	100.0%	91.7%	0.0%	8.3%
Electricians	453,790	100.0%	100.0%	0.0%	0.0%
Licensed Practical and Licensed Vocational Nurses	446,360	100.0%	100.0%	0.0%	0.0%
Supervisors of Office and Administrative Support Workers	433,025	38.9%	39.5%	60.5%	0.0%
General and Operations Managers	432,315	24.6%	26.0%	74.0%	0.0%
Sales Representatives, Wholesale and Manufacturing	426,495	39.5%	40.3%	59.5%	0.2%
Police and Sheriff's Patrol Officers	405,652	89.0%	87.9%	12.1%	0.0%
Sales Representatives, Services, All Other	370,776	44.9%	45.0%	53.8%	1.2%
Supervisors of Retail Sales Workers	368,040	64.9%	45.1%	21.3%	33.6%
Automotive Service Technicians and Mechanics	338,550	100.0%	76.9%	0.0%	23.1%
Plumbers, Pipefitters, and Steamfitters	313,670	100.0%	99.7%	0.0%	0.3%
Secretaries and Administrative Assistants	284,418	73.6%	17.7%	5.1%	77.2%
Construction Laborers	270,250	100.0%	40.2%	0.0%	59.8%
Computer User Support Specialists	262,827	53.1%	52.6%	47.1%	0.3%
Supervisors of Construction Trades and Extraction Workers	254,647	65.9%	65.3%	34.7%	0.0%
Executive Secretaries and Executive Administrative Assistants	227,786	46.0%	47.3%	52.7%	0.0%
Securities, Commodities, and Financial Services Sales Agents	225,101	70.8%	66.9%	32.1%	1.0%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	221,640	100.0%	100.0%	0.0%	0.0%
Supervisors of Mechanics, Installers, and Repairers	204,586	65.4%	65.5%	34.5%	0.0%
Supervisors of Transportation and Material Moving Workers	204,286	71.8%	72.0%	28.0%	0.0%
Supervisors of Production and Operating Workers	202,699	53.5%	53.5%	46.5%	0.0%

Sources: Authors' calculations using data from BLS Occupational Employment Statistics (May 2017), Burning Glass Technologies (2015-2017), BEA Regional Price Parities (2016), and American Community Survey Five-Year Public Use Microdata Sample (2012-2016)

Federal Reserve Bank of Kansas City



Skilled Trade Pays

Albuquerque, New Mexico

TOP 10 OPPORTUNITY OCCUPATIONS IN 2017

- | | |
|---|--|
| 1 REGISTERED NURSES
Annual Median Wage: \$72,700
Opportunity Employment: 7,600 | 2 HEAVY AND TRACTOR-TRAILER TRUCK DRIVERS
Annual Median Wage: \$39,000
Opportunity Employment: 3,700 |
| 3 GENERAL AND OPERATIONS MANAGERS
Annual Median Wage: \$98,800
Opportunity Employment: 2,900 | 4 SUPERVISORS OF RETAIL SALES WORKERS
Annual Median Wage: \$37,200
Opportunity Employment: 2,800 |
| 5 SUPERVISORS OF OFFICE AND ADMINISTRATIVE SUPPORT WORKERS
Annual Median Wage: \$50,900
Opportunity Employment: 2,700 | 6 ELECTRICIANS
Annual Median Wage: \$47,000
Opportunity Employment: 2,000 |
| 7 POLICE AND SHERIFFS
Annual Median Wage: \$50,000
Opportunity Employment: 2,000 | |
| 9 PLUMBERS, PIPEFITTERS, AND STEAMFITTERS
Annual Median Wage: \$50,000
Opportunity Employment: 2,000 | |

Boulder, Colorado

TOP 10 OPPORTUNITY OCCUPATIONS IN 2017

- | | |
|---|---|
| 1 REGISTERED NURSES
Annual Median Wage: \$74,900
Opportunity Employment: 2,200 | 2 MAINTENANCE AND REPAIR WORKERS
Annual Median Wage: \$37,500
Opportunity Employment: 9,400 |
| 3 BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS
Annual Median Wage: \$44,800
Opportunity Employment: 1,100 | 4 SALES REPRESENTATIVES, SERVICES
Annual Median Wage: \$53,300
Opportunity Employment: 900 |
| 5 COMPUTER USER SUPPORT SPECIALISTS
Annual Median Wage: \$57,500
Opportunity Employment: 900 | 6 SUPERVISORS OF RETAIL SALES WORKERS
Annual Median Wage: \$46,800
Opportunity Employment: 700 |
| 7 AUTOMOTIVE SERVICE TECHNICIANS AND MECHANICS
Annual Median Wage: \$44,500
Opportunity Employment: 700 | 8 SALES REPRESENTATIVES, WHOLESALE AND MANUFACTURING
Annual Median Wage: \$64,500
Opportunity Employment: 700 |
| 9 GENERAL AND OPERATIONS MANAGERS
Annual Median Wage: \$133,700
Opportunity Employment: 700 | 10 MASSAGE THERAPISTS
Annual Median Wage: \$41,800
Opportunity Employment: 600 |

Kansas City, Missouri/Kansas

TOP 10 OPPORTUNITY OCCUPATIONS IN 2017

- | | |
|---|---|
| 1 SECRETARIES AND ADMINISTRATIVE ASSISTANTS
Annual Median Wage: \$35,400
Opportunity Employment: 18,000 | 2 REGISTERED NURSES
Annual Median Wage: \$64,500
Opportunity Employment: 16,300 |
| 3 HEAVY AND TRACTOR-TRAILER TRUCK DRIVERS
Annual Median Wage: \$45,700
Opportunity Employment: 16,000 | 4 ASSEMBLERS AND FABRICATORS
Annual Median Wage: \$38,300
Opportunity Employment: 14,900 |
| 5 MAINTENANCE AND REPAIR WORKERS
Annual Median Wage: \$37,500
Opportunity Employment: 9,400 | 6 BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS
Annual Median Wage: \$39,700
Opportunity Employment: 7,400 |
| 7 CONSTRUCTION LABORERS
Annual Median Wage: \$38,600
Opportunity Employment: 7,200 | |
| 9 GENERAL AND OPERATIONS MANAGERS
Annual Median Wage: \$105,200
Opportunity Employment: 5,800 | |

Omaha, Nebraska

TOP 10 OPPORTUNITY OCCUPATIONS IN 2017

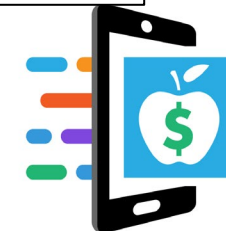
- | | |
|---|---|
| 1 HEAVY AND TRACTOR-TRAILER TRUCK DRIVERS
Annual Median Wage: \$39,400
Opportunity Employment: 12,900 | 2 REGISTERED NURSES
Annual Median Wage: \$64,500
Opportunity Employment: 16,300 |
| 3 CARPENTERS
Annual Median Wage: \$40,900
Opportunity Employment: 4,100 | 4 MAINTENANCE AND REPAIR WORKERS
Annual Median Wage: \$37,500
Opportunity Employment: 9,400 |
| 5 BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS
Annual Median Wage: \$37,500
Opportunity Employment: 3,800 | 6 GENERAL AND OPERATIONS MANAGERS
Annual Median Wage: \$89,800
Opportunity Employment: 2,800 |
| 7 ELECTRICIANS
Annual Median Wage: \$48,300
Opportunity Employment: 2,700 | 8 SUPERVISORS OF RETAIL SALES WORKERS
Annual Median Wage: \$38,300
Opportunity Employment: 2,700 |
| 9 SUPERVISORS OF OFFICE AND ADMINISTRATIVE SUPPORT WORKERS
Annual Median Wage: \$52,800
Opportunity Employment: 2,300 | 10 PLUMBERS, PIPEFITTERS, AND STEAMFITTERS
Annual Median Wage: \$59,900
Opportunity Employment: 2,200 |

Tulsa, Oklahoma

TOP 10 OPPORTUNITY OCCUPATIONS IN 2017

- | | |
|---|--|
| 1 REGISTERED NURSES
Annual Median Wage: \$60,000
Opportunity Employment: 5,500 | 2 HEAVY AND TRACTOR-TRAILER TRUCK DRIVERS
Annual Median Wage: \$41,500
Opportunity Employment: 5,700 |
| 3 BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS
Annual Median Wage: \$39,700
Opportunity Employment: 4,200 | 4 SUPERVISORS OF RETAIL SALES WORKERS
Annual Median Wage: \$34,700
Opportunity Employment: 3,700 |
| 5 WELDERS, CUTTERS, SOLDERERS, AND BRAZERS
Annual Median Wage: \$44,700
Opportunity Employment: 3,300 | 6 LICENSED PRACTICAL AND LICENSED VOCATIONAL NURSES
Annual Median Wage: \$41,500
Opportunity Employment: 2,400 |
| 7 SUPERVISORS OF OFFICE AND ADMINISTRATIVE SUPPORT WORKERS
Annual Median Wage: \$49,400
Opportunity Employment: 2,200 | 8 GENERAL AND OPERATIONS MANAGERS
Annual Median Wage: \$95,600
Opportunity Employment: 2,100 |
| 9 MACHINISTS
Annual Median Wage: \$44,100
Opportunity Employment: 2,100 | 10 SALES REPRESENTATIVES, SERVICES
Annual Median Wage: \$46,200
Opportunity Employment: 2,000 |

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ECON ED
from THE FED

preparing students for a workforce in transition

Skilled Trade Pays

<small>OPPORTUNITY OCCUPATION CARD</small> Administrative Assistant	<small>OPPORTUNITY OCCUPATION CARD</small> Plumber
<small>OPPORTUNITY OCCUPATION CARD</small> Assembler/ Fabricator	<small>OPPORTUNITY OCCUPATION CARD</small> Police Officer
<small>OPPORTUNITY OCCUPATION CARD</small> Automotive Mechanic	<small>OPPORTUNITY OCCUPATION CARD</small> Registered Nurse
<small>OPPORTUNITY OCCUPATION CARD</small> Bookkeeper/ Accountant	<small>OPPORTUNITY OCCUPATION CARD</small> Sales Representative <small>(Wholesale/Manufacturing)</small>
<small>OPPORTUNITY OCCUPATION CARD</small> Electrician	<small>OPPORTUNITY OCCUPATION CARD</small> Tractor-Trailer Truck Driver
<small>OPPORTUNITY OCCUPATION CARD</small> Massage Therapist	<small>OPPORTUNITY OCCUPATION CARD</small> Welder

HANDOUT 5: OPPORTUNITY OCCUPATION EXPLORATION

Section One

- My opportunity occupation is:
- Geographic location(s):
- Annual median wage(s):

Note: Use Handout 4: Opportunity Occupation Fact Sheets to complete this section. If your opportunity occupation can be found in more than one city, include the range from lowest to highest. (Example: \$45,000 in Tulsa, OK to \$62,500 in Boulder, CO)

Section Two *(Use back as needed)*

- Wage range:
- Job outlook/projected growth:
- States where this job is common:
- Largest employers:
- Primary responsibilities:
- Similar occupations:
- Human capital (skills, training, education) needed:

Note: Go to U.S. Bureau of Labor Statistics website, <https://www.bls.gov/ooh/>, to complete this section.

Section Three *(Use back as needed)*

- How does this opportunity occupation benefit the labor market overall?
- What makes this opportunity occupation more appealing than other opportunity occupations?

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PROJECT EVALUATION SHEET

Opportunity Occupation: _____

Group Score	Fair (1-3)	Good (4-6)	Excellent (7-10)	Notes
Infographic content				
Infographic design				
Infographic clarity				
Presentation				
Total (_____ out of 40 possible pts.) x 2 = _____ FINAL GROUP SCORE				

Student Name	Individual Score for Handouts			Individual Score x 2	Final Group Score <i>(from above)</i>	Total Individual Score
	Fair (1-3)	Good (4-6)	Excellent (7-10)			

SCORING RUBRIC	Fair (1-3)	Good (4-6)	Excellent (7-10)
Completion of Handouts	Completed a portion of handout accurately or didn't turn it in	Completed handout with some accuracy and grammar/punctuation errors	Completed handout accurately with correct grammar and punctuation
Infographic content	Included a portion of requested content	Included most of requested content	Included all requested content
Infographic design	Layout included text, minimal images/charts and no color variation	Layout included images/charts and text with minimal color variation	Layout included images, text and several charts/graphs with effective use of various colors
Infographic clarity	Information was difficult to interpret	Information could be interpreted somewhat	Information could be easily interpreted
Presentation	Shared little information, involved one group member and/or not easy to understand	Shared some information, involved some group members and/or easy to understand	Shared all information, involved all group members and/or easy to understand

HANDOUT 2: STUDENT ASSESSMENT (PART 2)

Student name _____

Day One – Summary *(Include terms – opportunity occupation and wages)*

Day Three – Human Capital Overview

Day Three – Opportunity Occupation Highlights

Administrative Assistant _____ _____ _____	Plumber _____ _____ _____
Assembler/Fabricator _____ _____ _____	Police Officer _____ _____ _____
Automotive Mechanic _____ _____ _____	Registered Nurse _____ _____ _____
Bookkeeper/Accountant _____ _____ _____	Sales Representative _____ _____ _____
Electrician _____ _____ _____	Tractor-Trailer Truck Driver _____ _____ _____
Massage Therapist _____ _____ _____	Welder _____ _____ _____

Of all the opportunity occupations introduced within the lesson, which one would you choose to pursue and why?



Teaching Tips 2.0

Teaching Tips 2.0 Opportunity Occupations

Teaching Tips is a resource that integrates current banking issues and research into your classroom with Federal Reserve research.



Teacher Resources

Student Activities

A Federal Reserve System initiative called “opportunity occupations” examines the impact of jobs that don’t require a four-year college degree, yet typically pay above the national annual median wage. The research conducted shows that opportunity occupations not only are an important part of the nation’s economy, but many careers in that employment sector are poised for solid growth. Access to more information about the initiative can be found at [Investing In America's Workforce: Opportunity Occupations](#).

[Reading Synopsis](#) ▲

[Video Synopses](#) ▲

[Links and Resources](#) ▲

[About Teaching Tips 2.0](#) ▲

This resource offers a range of interdisciplinary activities centered on nonfiction reading about career education. The activities align with the topic and include data for students to calculate and analyze, multimedia for students to view and respond to and questions at two levels of complexity for students to answer. Additionally, economic and personal finance vocabulary and extension activities are provided. After students have read the text, teachers can assign any of the stand-alone activities. Through these, students can build their cognitive and critical thinking skills while supporting their learning in English language arts, math, economics and personal finance.

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Teaching Tips 2.0

Student Activities:

- Vital Vocabulary
- Reading and Reflection
- Video Views
- Facts and Figures
- Extension Exercises

Why do 30% of college freshmen drop out?

Create graph of employment figures and percentage differences



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Opportunity Occupations: Good pay; no degree required

Topics: News



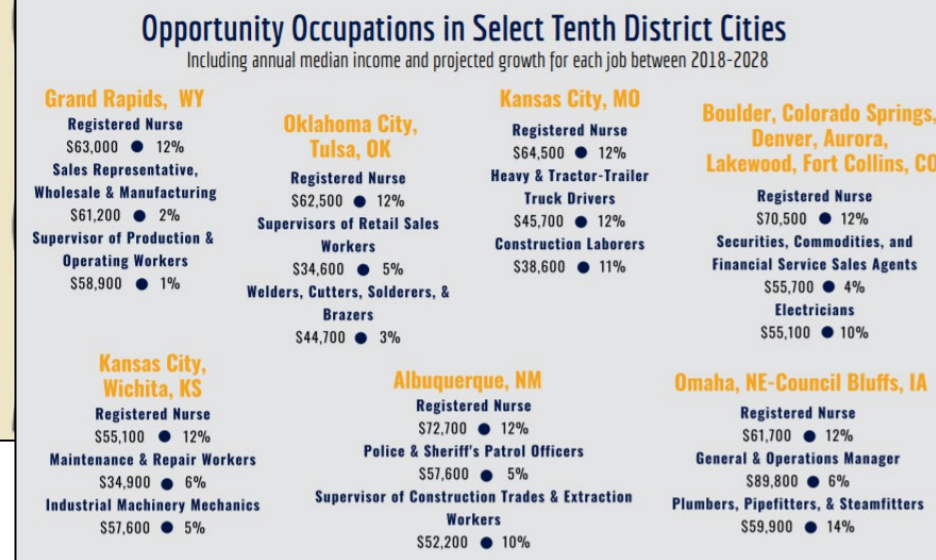
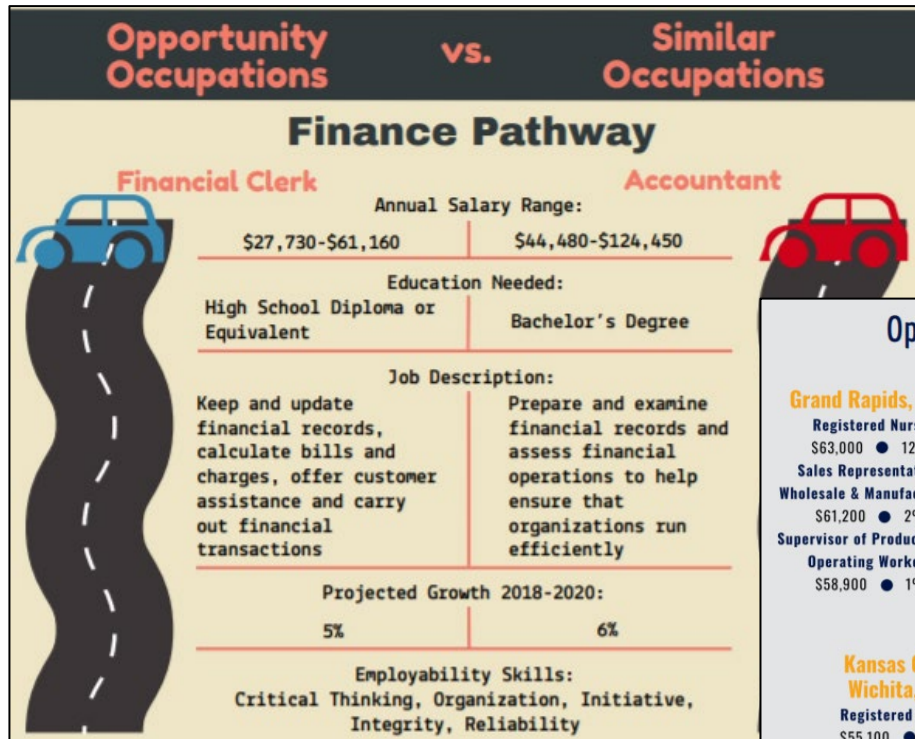
Story by Debra Skodack; Photography by Gary Barber; Videography by Brett Smith and Kevin Wright

APRIL 15, 2020 | Spring 2020 | A Federal Reserve System initiative called "Opportunity Occupations"

Percentage change of median annual wage from 2017 to 2019. What will it be in 2021?



Infographics



Employability Skills: A Toolkit for Success



Employability, or 'soft' skills, are core qualities that are useful in any career path you choose. As your job grows or changes, developing these traits can help you be more successful and marketable in a competitive job market.

Organization

Ways to Build Organization:

- Set reminders to help you keep track of tasks and meetings
- Establish steps to complete a goal or a big assignment

Careers: Accountant, Administrative Assistant, Editor, Event Planner, Statistician

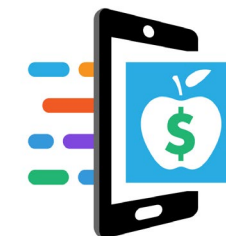
Reliability

Ways to Build Reliability:

- Be on time to class and appointments
- Follow through on a commitment or provide a solid reason why you can't

Careers: Court Reporter, Dental Hygienist, Electrician, Funeral Director, Truck Driver

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ECON ED
from THE FED

preparing students for a workforce in transition

Fed Opportunity Occupations Videos

- Asset Management Specialist – IT Technology Support
- Information Security Technician – IT Application & Development
- Customer Support Specialist – Financial Services
- Cash Operations Specialist – Cash Services
- Facilities Technician – Facilities Management
- Law Enforcement Officer – Law Enforcement



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21st Century Careers Videos

Student Webinar Series:

- A Portrait of Leadership
- Today's Leadership Landscape
- Skills for Success
- Opportunity Occupations



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Upcoming Evening with the Fed events:

- *February – Climate Risks and the Economy*
- *March – COVID Effects on Agricultural Economy*
- *April – Energy and the Economy*
- *May – COVID Impact and Economic Recovery*

KansasCityFed.org/Education and
KansasCityFed.org/community/workforce

