

Upping your Econ and Finance Game



NCE 2018

Jennifer Davidson, President, Nebraska Council on Economic
Education and Assistant Professor of Practice, UNL

Dr. Jamie Wagner, Assistant Professor of Economics and Director,
Center for Economic Education, UNO

Agenda for the Day

10-10:30 Careers and Education Game (Jamie)

10:30-11:15—Wage Game (Jennifer)

11:15-12—Why are some people paid more than others? (Jamie)

12-12:45—Lunch

12:45-1—Econ Dance (Jamie)

1-1:45—Next Gen (Jamie)

1:45-2—Evaluations (Jennifer)

Careers and Education Game

Jamie Wagner

From the Richmond and San Francisco Federal Reserves

Step 1

Please get in order based on how much education your career needs from “Less than a high school diploma” to “doctoral degree” (least to most education)



Education

1. Cashier – Less Than High School Diploma
2. Photographer - High School Diploma
3. Veterinary Assistant - High School Diploma
4. Airline Pilot-Certificate
5. Automotive Technician- Certificate
6. Barber/Cosmetologist - Certificate
7. Firefighter - Certificate
8. Legal Assistant - Associate's Degree
9. Dental Hygienist - Associate's Degree
10. Occupational Therapist Assistant-Associate's Degree
11. Preschool Teacher - Associate's Degree
12. Athletic Trainer - Bachelor's Degree
13. Graphic Designer - Bachelor's Degree
14. Computer Engineer - Bachelor's Degree
15. Nurse - Bachelor's Degree
16. High School Teacher-Bachelor's Degree
17. Economist - Master's Degree
18. Lawyer – Doctoral Degree
19. Physician - Doctoral Degree

Step 2

Get in order of income that you think your career earns on average from lowest to highest.



Income

1. Cashier - \$19,000
2. Barber/Cosmetologist - \$24,000
3. Veterinary Assistant - \$25,000
4. Preschool Teacher - \$29,000
5. Photographer - \$32,000
6. Automotive Technician - \$38,000
7. Athletic Trainer - \$46,000
8. Firefighter - \$47,000
9. Graphic Designer - \$48,000
10. Legal Assistant - \$ 50,000
11. Occupational Therapist Assistant-\$57,000
12. High School Teacher-\$59,000
13. Nurse - \$67,000
14. Dental Hygienist - \$73,000
15. Economist - \$99,000
16. Airline Pilot-\$110,000
17. Computer Engineer - \$112,000
18. Lawyer - \$116,000
19. Physician - \$187,000

Debrief

- What do you notice about the jobs and education?
- What surprised you the most about the ranking of education?
- What do you notice about the income and education?
- What surprised you the most about the ranking of income?

Who determines Wages?

Jennifer Davidson

Who determines Wage Rates?

- Lesson 13
- [High School Economics 3rd Edition](#), Council for Economic Education
- Will email the lesson and will raffle two books!

How do workers and business owners interact within labor markets to determine wage rates?

National Occupational Wage Estimates (2017)

Retail salesperson: \$25,560

Medical secretary: \$35,870

Firefighter: \$51,930

Electrician: \$57,910

Secondary school teacher: \$62,730

Police officer: \$64,540

Insurance sales agent: \$66,990

Registered nurse: \$73,550

Pharmacist: \$121,710

Computer and information systems manager: \$149,730

Anesthesiologist: \$265,990

Source: https://www.bls.gov/oes/current/oes_nat.htm

**Why do the average salaries of workers in different industries vary so much?
How are the average salaries of various working professionals determined?**

Rules

- Simulation of the labor market
 - Some buyers of labor (businesses)
 - Some sellers of labor (workers)
- Demonstrates how buyers and sellers of labor interact to establish wage rates for workers in the labor market.
- Two business are looking to hire workers
 - Accounting firm
 - Construction firm
- Each requires unique skill sets and production capabilities from its workers.

Things to keep in mind

- What productive resource do workers sell to employers in order to earn a wage or salary?
 - Labor – quantity and quality of human effort used to produce goods/services
 - Human capital – set of skills; increases value
- Why are employers willing to pay wages and/or salaries to acquire workers?
- Who are the suppliers of labor?
- Who are the demanders of labor?
 - Demand for labor is derived demand, meaning there is only a demand for the labor because there is demand for the product they create.

Our Labor Market

- Need 4 volunteers to be employers
 - 2 accounting
 - 2 construction
 - Work together during testing, but then split up into your two firms.
- Everyone else is a potential worker
- Two tests to showcase your talents
 - Math (employers read company info during math test)
 - Hand/eye coordination
- Name on resume score sheet (activity 13.3)

Math Test... Sorry we know it's summer!

- Do not turn over until instructed to do so
- Instructions for math test
 - Answer all questions as quickly and accurately as possible. As soon as you are done, raise your hand and say, "Done." As soon as the first four people say, "Done," testing will end for all test takers. Tests will be graded by the employers. You will earn one point for each correct answer.
 - No calculators allowed. Testing will be limited to four minutes.
- Begin!
- Provide key to employers to grade.
 - Line up in one of 4 lines.
 - Employer will write score on your resume.

Hand/Eye Coordination Test

- Line up in 4 lines, one line per employer
- Instructions
 - You will be given 10 pennies to throw in a cup, one at a time. You will have 30 seconds in which to attempt all 10 throws. Each penny that lands in the cup earns one point. Each penny can be thrown one time only. (Note: All throws must be from behind a line that is 3 feet from the cup)
 - Remain quiet while it is not your turn or you will be disqualified and earn a score of zero.
- Employers will score resumes.

Employers

- You are now two firms – Accounting and Construction
 - All hiring decisions should be based on the company info you read.
- Provide 1 copy of activity 13.6 to each firm.
- Complete the profit calculations at the end of the hiring process.

Workers and Market

- **Workers**

- Labor market is open
- You are free to talk to either business about possible job openings
- Bring your completed resumes. This will provide valuable information about your production potential.

- **Market**

- 5 to 10 minutes to complete negotiations
- When an employer and worker agree on wage, shake hands.
- Worker records the wage on their resume sheet.
- Employer records first name of employee, the wage, and skill point total.
- Workers who have been hired return to seats.
- After market close, ensure all paperwork complete, and calculate profits.

Debrief

Questions for hired workers:

- What wage did you agree on with your new employer?
- Did anybody have a job offer from both companies?
- Why did you agree to this specific wage?
- Why didn't you hold out for higher wages?

Debrief

Questions for employers:

- Why did you agree to these specific wage rates?
- What variety of wages did you agree to pay? Why didn't everyone get paid the same amount?
- Why didn't you agree on lower wages?
- What were your total profits at the end of round 1?

Questions for workers who were not hired?

- Why weren't you hired?

Round 2 Labor Market

- Construction company has seen an increase in the demand for housing and more workers are needed in the construction industry. (Activity 13.7 for Construction firm).
- No changes in the accounting industry.
- Potential Workers
 - All back to being jobless and are free to explore job openings in either market
 - Use the same resume scores from initial testing
- New activity 13.6 to both firms.
 - 5 to 10 minutes same as before

Debrief

Questions for hired workers:

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Debrief

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Closure

- What is a labor market?
- Who represents supply and who represents demand in a labor market?
- What is derived demand?
- How are wages paid to workers and rising prices paid for the goods and services produced by those workers linked?
- How is worker productivity linked to wage rates?
- Why do anesthesiologists earn higher salaries than salespeople?

Wage Differentials

Jamie Wagner

Why are some people paid more than others?

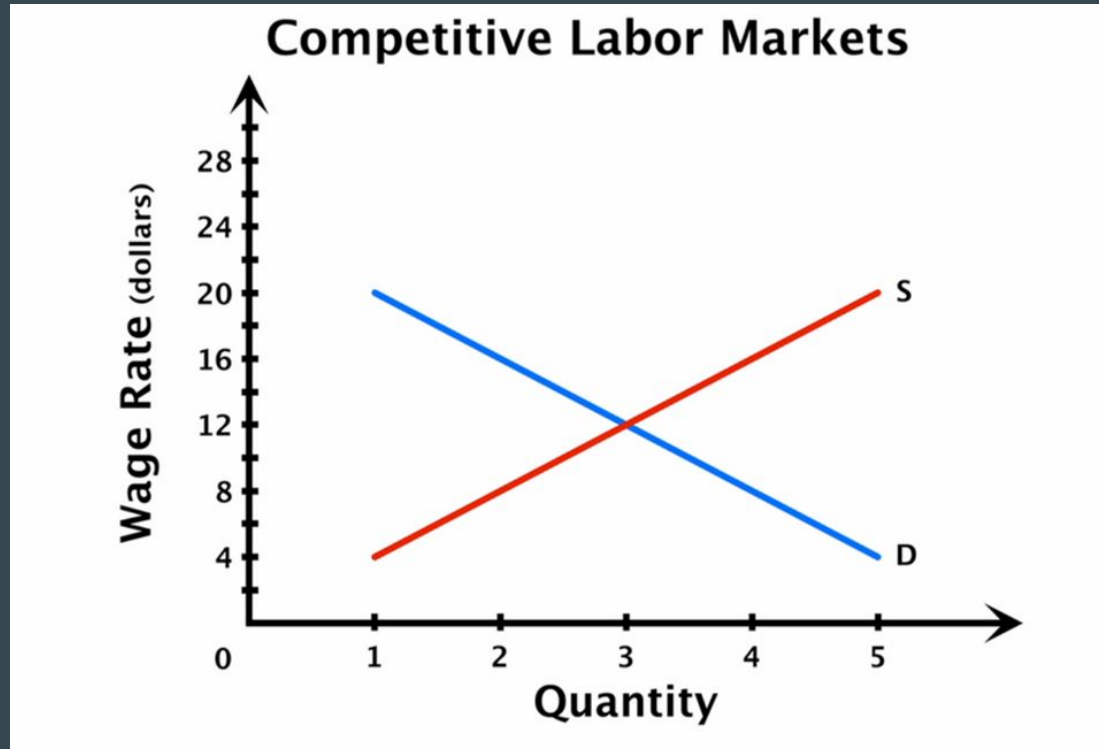
It all comes down to supply and demand!

Wage determination--we need S and D

- What is the price of labor?
- Who are the demanders of labor?
 - Do they demand more or less workers when wages increase? Decrease?
- Who are the suppliers of labor?
 - Do they supply more or less when wages increase? Decrease?



Equilibrium wage rate



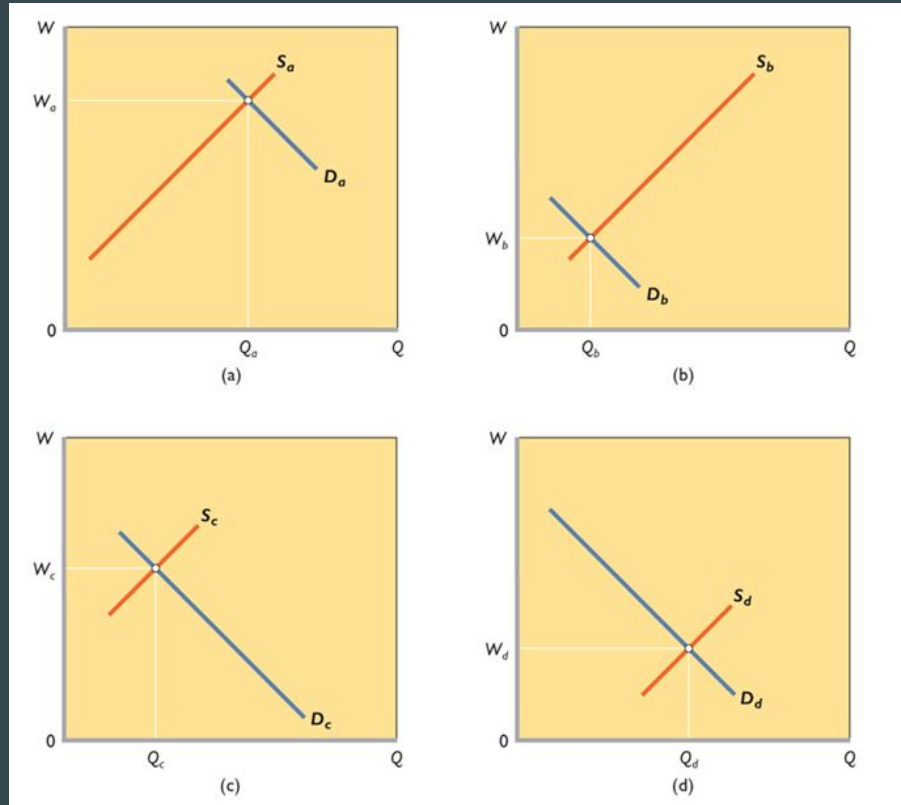
BLS Wage Data

- [Highest Paid Occupations](#)
- [Occupations that are paid less than \\$25,000](#)

Take a look at the [BLS Occupational Outlook Handbook](#)

Supply and Demand Matter!

- Which graph(s) have the higher equilibrium wage rates?
- What do you notice about them?
- What does this mean for you pursuing a degree to eventually get a job?!

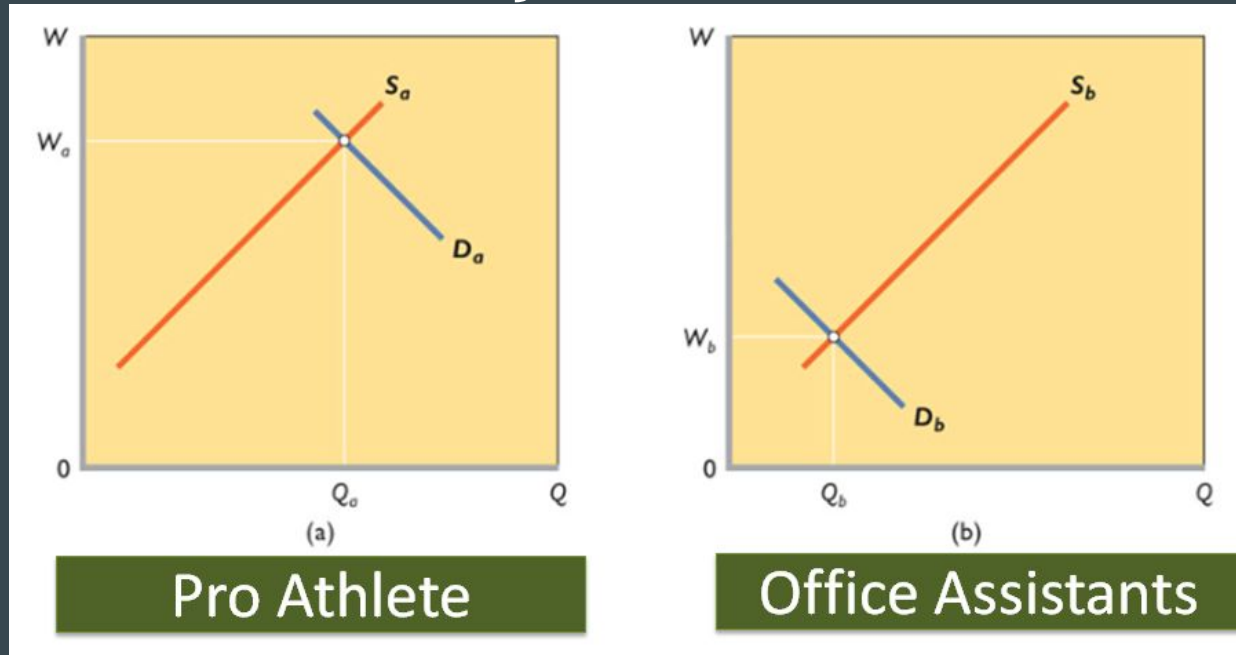


Riddle me this...

- Why are garbage collectors paid so much?
 - Hazardous Materials removal workers 2016 median pay = \$45,330
- Why are DJs paid so little?
 - Announcers 2016 median pay = \$30,830

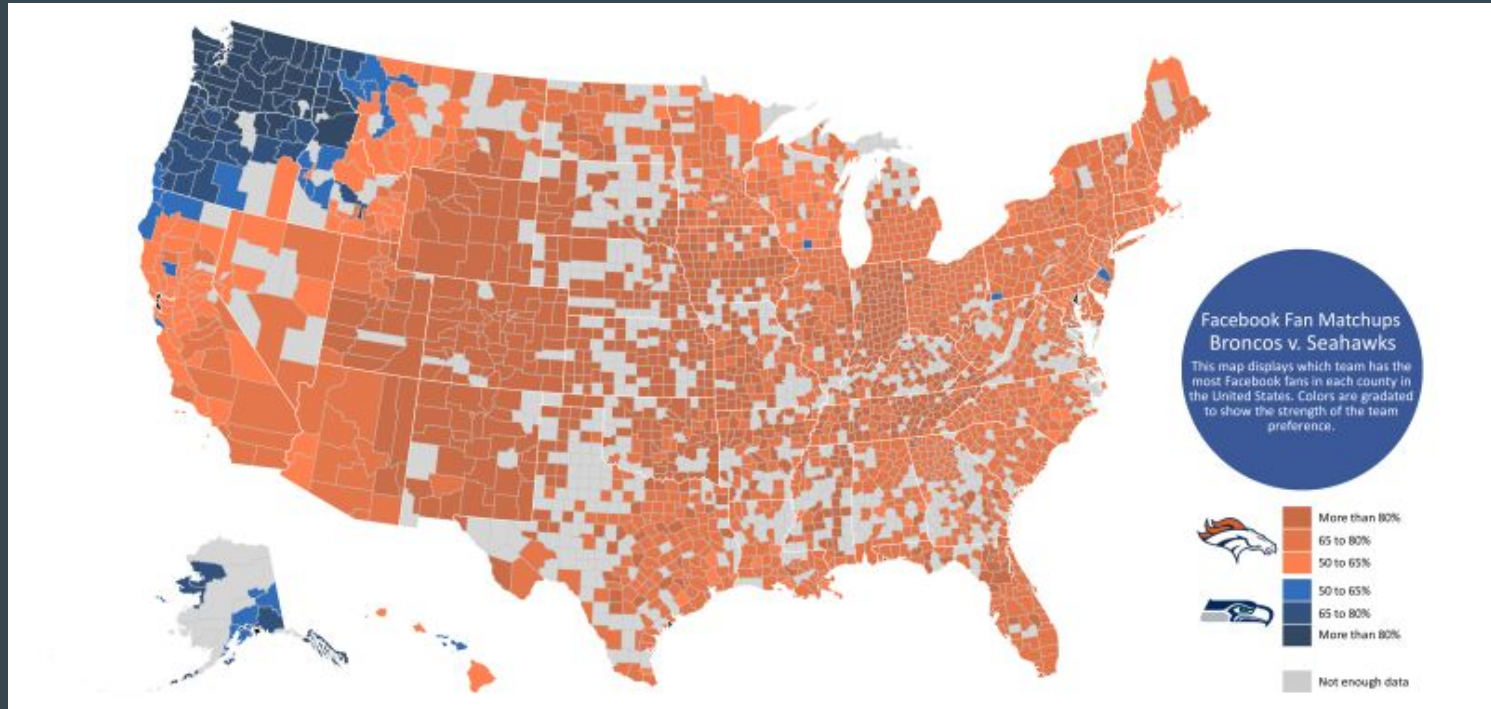


Productivity difference



Think about how much money do they bring into the company

Super Bowl L--Broncos vs. Seahawks



Productivity

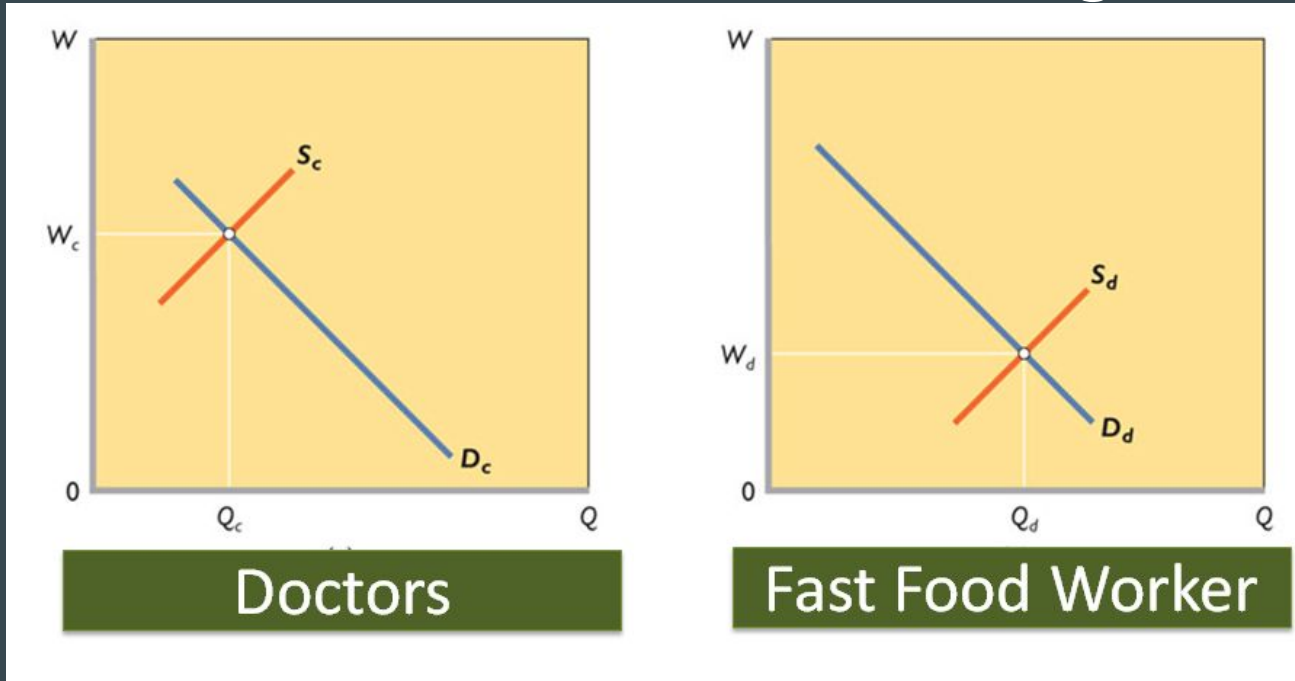


- How much money did Peyton Manning bring to the Colts then the Broncos

Vs.

- How much money does the best office assistant bring to a company

Ability, Education, and Training Difference



Certain jobs require more training, different abilities, etc. They are compensated for these differences

What is human capital?



Welcome 欢迎光临 Bienvenue
Bienvenidos 🖐 Willkommen
Добро пожаловать Hoş geldiniz
Benvenuti Welkom Dobrodošli
歡迎光臨 Bem-vindo ようこそ
Bonvenon Witamy أهلاً وسهلاً
Aloha Selamat datang ברוך הבא
Được tiếp đãi ân cần 환영합니다



List 5 skills or talents that you have now?

- 1.
- 2.
- 3.
- 4.
- 5.

OCCUPATIONAL OUTLOOK HANDBOOK

Computer and Information Technology >

Computer Programmers

EN ESPAÑOL

Summary | What They Do | Work Environment | How to Become One | Pay | Job Outlook | State & Area Data | Similar Occupations | More Info

Summary

Quick Facts: Computer Programmers

2016 Median Pay ?	\$79,840 per year \$38.39 per hour
Typical Entry-Level Education ?	Bachelor's degree
Work Experience in a Related Occupation ?	None
On-the-job Training ?	None
Number of Jobs, 2014 ?	328,600
Job Outlook, 2014-24 ?	-8% (Decline)
Employment Change, 2014-24 ?	-26,500



Programmers spend most of their time writing and testing computer code.

What Computer Programmers Do

Computer programmers write and test code that allows computer applications and software programs to function properly. They turn the program designs created by software developers and engineers into instructions that a computer can follow.

Work Environment

Programmers usually work in offices, most commonly in the computer systems design and related services industry.

How to Become a Computer Programmer

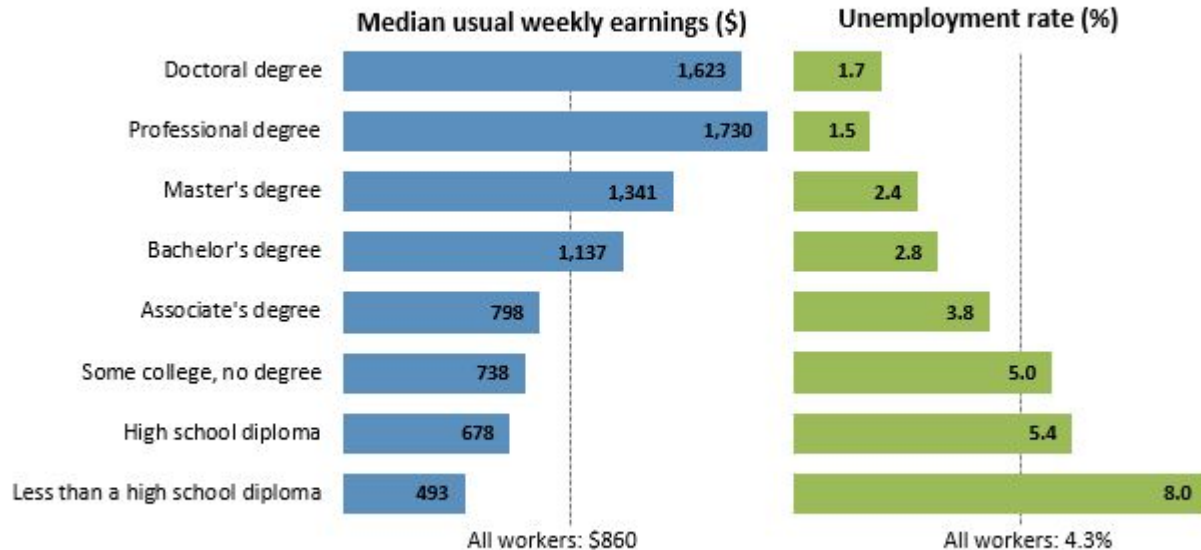
Most computer programmers have a bachelor's degree; however, some employers hire workers with an associate's degree. Most programmers specialize in a few programming languages.

Q: Why is there a projected decline (-8%)?

A: Employment of computer programmers is projected to decline 8 percent from 2014 to 2024. Computer programming can be done from anywhere in the world, so companies sometimes hire programmers in countries where wages are lower.

How does education affect income and employment?

Earnings and unemployment rates by educational attainment, 2015



Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.

Source: U.S. Bureau of Labor Statistics, Current Population Survey

The Effects of Unemployment

- On students' education and career choices
- Entrepreneurs
- Business owners

Let's look at Nebraska Data.

— Unemployment Rate in Nebraska



Source: U.S. Bureau of Labor Statistics
fred.stlouisfed.org

myf.red/g/eIo1

Lincoln

FRED

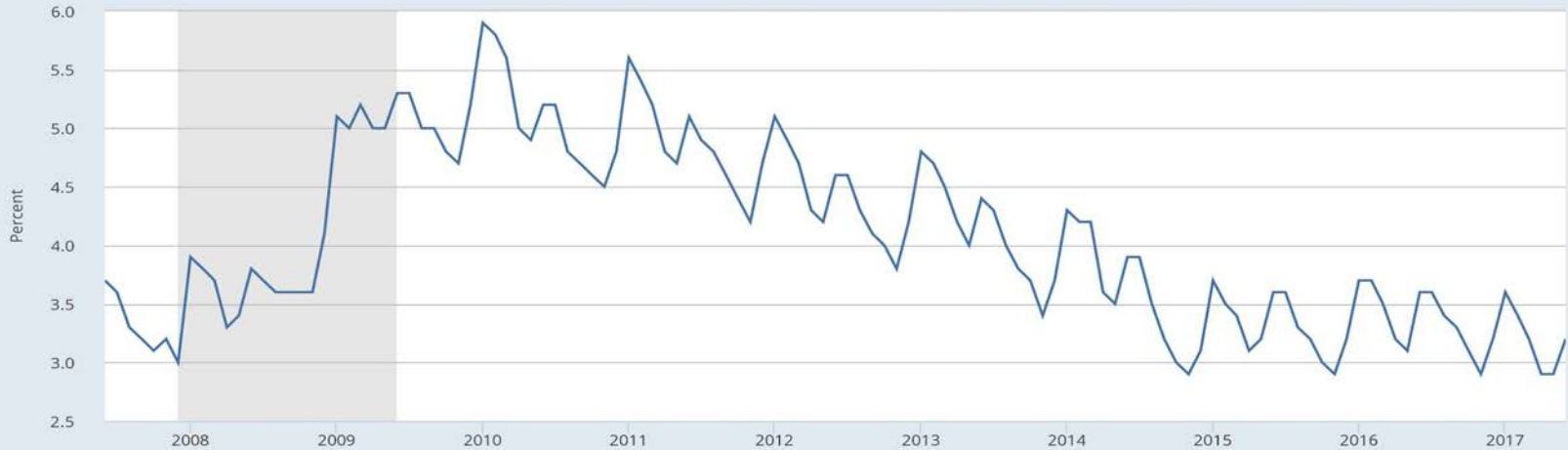
Unemployment Rate in Lincoln, NE (MSA)



Omaha, CB

FRED

Unemployment Rate in Omaha-Council Bluffs, NE-IA (MSA)



Why does this matter to you?!

What type of education is the best?

What are the pros and cons of attending a:

1. 4 year large state university
2. 4 year private or liberal arts college
3. Community college
4. Technical institute

Where is YOUR next step?

What sort of things should you look into when deciding which institution to attend?

1. Do they have the major you're interested in?
2. What is the faculty to student ratio?
3. What extracurriculars are offered?
4. What support is offered to students?
5. Are scholarships available? Or work study programs?

Choices, Choices, Choices

As an educator you have an incredibly tough job--you are preparing students for jobs that literally may not exist yet!

Lunch

Please be back here by 12:45



vevo

Econ Dance!

Jamie Wagner

- Supply--right forearm in an upward sloping direction
- Demand--left forearm in an upward sloping direction that creates an X with the other forearm.
- Equilibrium-- bring the X to your nose.
- Substitutes--shove your hand straight up twice in a row. This shows that as price rises, demand for the related good rises.
- Complements--shove your hand straight up and then bring in back down in one motion. This shows that as prices rise, demand for the related good falls.
- Normal Goods--same as substitutes (just use other arm/hand)
- Inferior Goods--same as complements (just use other arm/hand)
- Inelastic--have your arm at a right angle with focus on the upper arm (straight up like a perfectly inelastic demand)
- Elastic--have your arm straight out (straight out like a perfectly elastic demand)
- Production Possibility Frontier--move your upper arm from 90 degrees to 180 degrees which shows the arc of the PPC.

Next Gen Personal Finance (NGPF)

Jamie Wagner

SCAVENGER HUNT

A cartoon detective character wearing a brown trench coat and hat, holding a magnifying glass over the letter 'H' in the word 'HUNT'. The character has a large blue eye and is pointing towards the letter.

www.ngpf.org

<u>Curriculum</u>	<u>Resources</u>	<u>Community</u>	<u>Teacher PD</u>	<u>About</u>	<u>Support</u>	<u>#FinHero</u>
<ul style="list-style-type: none"> <input type="checkbox"/> Units <input type="checkbox"/> Semester Course <input type="checkbox"/> 8-Week Course <input type="checkbox"/> 18-Hour Workshop <input type="checkbox"/> 8-Hour Workshop <input type="checkbox"/> Middle School <input type="checkbox"/> Assessments 	<ul style="list-style-type: none"> <input type="checkbox"/> Activities <input type="checkbox"/> Projects <input type="checkbox"/> Case Studies <input type="checkbox"/> Question of the Day <input type="checkbox"/> Interactive Library <input type="checkbox"/> Video Library <input type="checkbox"/> Data Crunch <input type="checkbox"/> The Fine Print 	<ul style="list-style-type: none"> <input type="checkbox"/> Blog <input type="checkbox"/> Podcasts <input type="checkbox"/> NGPF Fellows <input type="checkbox"/> Contests <input type="checkbox"/> Flash Surveys <input type="checkbox"/> Newsletters 	<ul style="list-style-type: none"> <input type="checkbox"/> Webinars <input type="checkbox"/> PLC <input type="checkbox"/> Events <input type="checkbox"/> Summer Institute 	<ul style="list-style-type: none"> <input type="checkbox"/> About Us <input type="checkbox"/> In the Press <input type="checkbox"/> Testimonials 	<ul style="list-style-type: none"> <input type="checkbox"/> Help Center <input type="checkbox"/> Contact Us 	<p>Become a FinHero today!</p>

www.ngpf.org



- What did you find that interests you?
- How will you customize it to meet your students' needs?

- Sign Up For a Teacher Account
 - Access to Assessments
 - Answer Keys
- How?
 - Home Page, upper right



+ Create Free Account

Who is NGPF?

- NGPF is a small non-profit organisation based in Palo Alto, CA

To revolutionize the teaching of personal
finance in all schools and to improve the
financial lives of the
next generation of Americans.

Challenge: “I love to modify resources I find to align with my students’ interests and needs.”



Challenge: “I spend too long searching for relevant, engaging resources and often come up empty.”



Challenge: “I wish there was a website that had everything I need in one place.”

The screenshot displays a website interface with two main columns. The left column is titled "Lessons:" and contains a list of seven items, each with a blue plus icon and a horizontal line below it:

- 1.0 - Unit Plan
- 1.1 - Checking Basics
- 1.2 - Pick a Payment Method
- 1.3 - Manage Your Checking Account
- 1.4 - Beware of Checking Fees
- 1.5 - Online & Mobile Banking
- 1.6 - Select a Checking Account
- 1.7 - Checking Alternatives

The right column contains three sections:


- Activities**
 - ANALYZE: How We Interact With Banks (Sp)
 - CALCULATE: Reconcile Your Checkbook
 - COMPARE: Checking Alternatives
 - [View More...](#)
- Projects**
 - Automate Your Check Register
 - Bank Reviews
 - Checking Account vs. Check Cashing Service
 - [View More...](#)
- Data Crunch**
 - How Do Consumers Access Their Checking Accounts?
 - How Much Does Your Checking Account Cost Your Bank?
 - How Safe Are Mobile Banking and Payments?
 - [View More...](#)
- Questions of the Day**
 - How do people pay for things (by age)?
 - What are the most used alerts that consumers set up on their bank accounts?
 - What is the average annual cost of a checking account?

FREE...and Always Will Be!



Primary

Supplemental

- 
- Semester Course
 - Units
 - Lessons
 - 8-Wk Course
 - 8-Hr Workshop
 - Middle School Resources
 - Activity Bank (Sp)
 - Project Bank (Sp)
 - Case Studies (Sp)
 - Assessment Bank
 - Spreadsheets
 - PAYBACK Game
 - Video Library
 - Interactive Library
 - Questions of the Day (Daily)
 - The Fine Print
 - Data Crunches

New addition
Coming soon

In-Person

Live Online

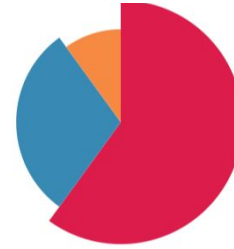
Archived Online

- National and state conferences
- NGPF Summer Institute (x2!)
- **FinCamp**

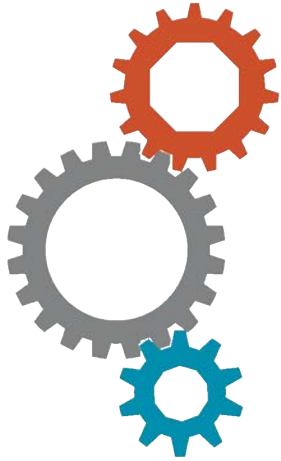
- Professional Learning Communities (PLC)
- Monthly webinars
- NGPF Fellows
- Facebook Group

- Weekly Podcasts
- Flash Surveys
- NGPF Blog
- Newsletter

New addition
Coming soon

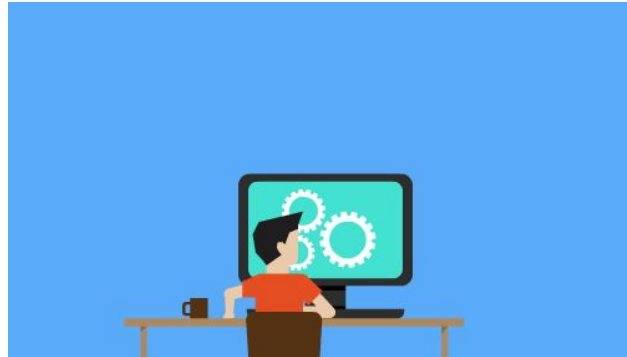


60%
30%
10%

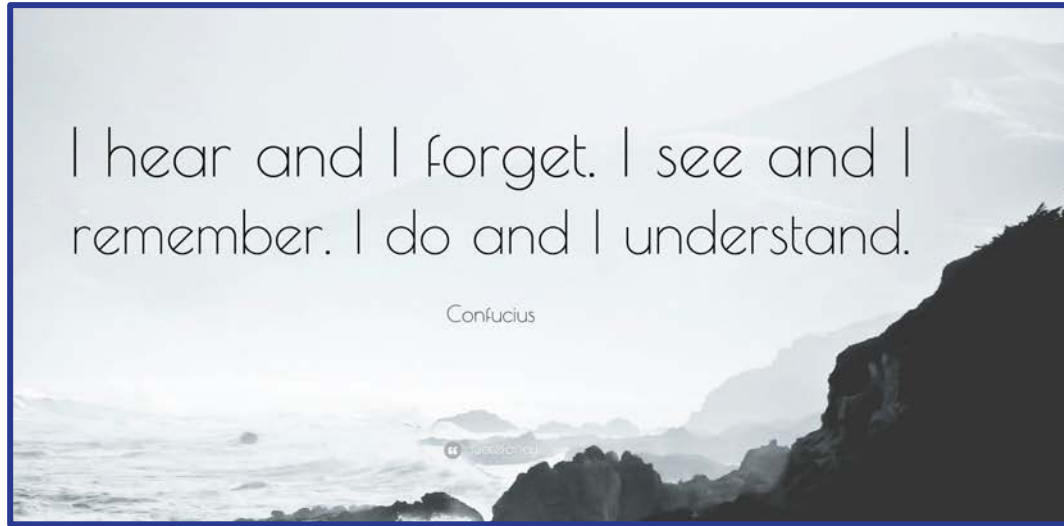


Teaching Through Interactives

@NextGenPF #NGPFFinCamp



- Why is the content related to Personal Finance sometimes difficult to teach or for students to learn?



Play Spent or Payback using our Activity Worksheets to guide your experience.

www.timeforpayback.com

playspent.org



Find more Interactives in NGPF's Interactive Library!



THINK
(Yourself)



PAIR
(With a partner)



SHARE
(Whole class)

Think, Pair, Share:

- How would you use Spent or Payback in your classroom?
- How would you customize this resource?
- Are there other Interactives you love using?
- Check out our Interactive Library to find more!

Survey: bit.ly/2lOuOWk

- Name
- Email
- Location (City, State)
- Favorite resource during Scavenger Hunt
- How many NGPF resources did you find that were of interest to you today?

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[@NextGenPF](https://twitter.com/NextGenPF)



[Next Gen Personal Finance](https://www.facebook.com/NextGenPersonalFinance)



info@ngpf.org

Thank you!

I'll be sending this slide deck to all conference participants. Please email Jennifer (jdavidson2@unl.edu) or Jamie (jfwagner@unomaha.edu) if you have any questions

Evaluations

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