# Getting and Using Current Career Data (Labor Market Information) to Help Students Prepare for Careers that will Actually be in Demand when They Graduate

**Emil Barnabas** 

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www.CareerOutlook.US/presentations



If we really want to prepare our students for successful careers, we need to know all we can about the rapidly changing job market.



# What is Labor Market Information?

- The body of information that deals with the functioning of labor markets and the determination of the demand for and supply of labor.
- It includes, but is not limited to, such key factors as changes in the level and/or composition of economic activity, the population, employment and unemployment, income and earnings, wage rates, and fringe benefits.

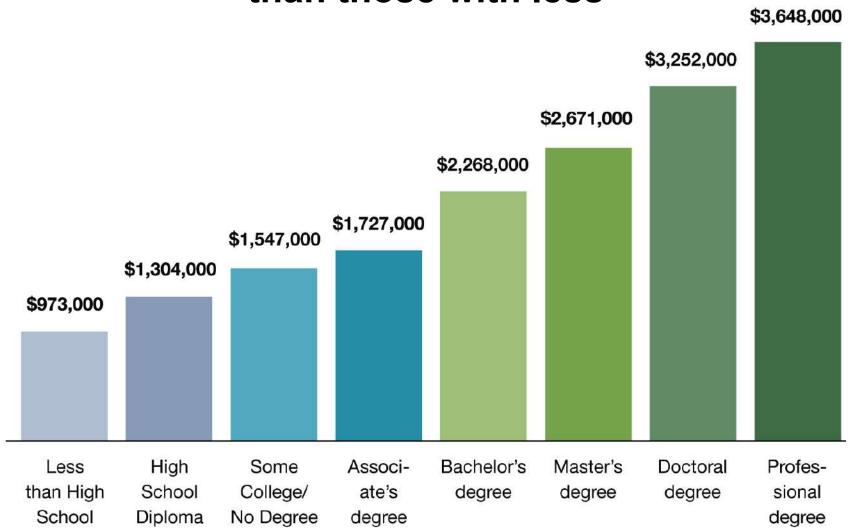
# What is Labor Market Information?

- Economic or labor force information (the number of people employed and unemployed)
- Occupational information (descriptions of occupations)
- Demographic information (characteristics of the general population related to employment and workers)



# **Degree Level Matters**

People with more education make more money than those with less



# **Average Starting Salaries for 2009 College Graduates in FL**

\$47,708Associate in Science (community college)

\$44,558Bachelor degree (private college)

\$39,108Certificate (community college)

\$36,552Bachelor degree (state college)

Miami Herald - Jan 1, 2011



# **Average Starting Salaries for 2005 College Graduates in OH**

\$35,648Associate degree

\$33,218Bachelor degree



# Fastest Growing Occup. in USA Requiring Postsecondary Education

- 11,900Registered Nurses
- 58,400Elementary and Middle School Teachers
- 14,600Software Developers and Programmers
- 05,700Postsecondary Teachers
- 02,000Nursing Aides, Orderlies, and Attendants
- 48,800Elementary School Teachers, Except Special Education
- 90,700Accountants and Auditors
- 33,700Health Practitioner Support Technologists and Technicians
- 78,600Counselors
- 68,500Licensed Practical and Licensed Vocational Nurses
- 68,300Physicians and Surgeons
- 57,200Management Analysts
- 46,300Preschool and Kindergarten Teachers
- 43,800Software Developers, Applications



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# Fastest Growing Occup. in USA

- 711,900Registered Nurses
- 706,800Retail Salespersons
- 706,300Home Health Aides
- 607,000Personal Care Aides
- 497,700Driver/Sales Workers and Truck Drivers
- 489,500Office Clerks, General
- 437,300Laborers and Material Movers, Hand
- 425,400Fast Food and Counter Workers
- 398,000Combined Food Preparation and Serving Workers, Including Fast
- 359,000Building Cleaning Workers
- 358,400Elementary and Middle School Teachers
- 338,400Customer Service Representatives
- 330,100Heavy and Tractor-Trailer Truck Drivers
- 328,500Miscellaneous Healthcare Support Occupations

# Fastest Growing Occup. in USA

- D.5Personal Care Aides

  Home Health Aides

  1,017,700 in 2010 :: 706,000 increase

  1. Biomedical Engineers

  15,700 in 2010 :: 9,700 increase
- 0.1Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marb
- 5.7Helpers--Carpenters
- 2.0Veterinary Technologists and Technicians
- 3.6Reinforcing Iron and Rebar Workers
- 5.7Physical Therapist Assistants
- 5.4Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters
- 4.6Physical Therapist Assistants and Aides
- 3.7Meeting, Convention, and Event Planners
- 3.5Diagnostic Medical Sonographers
- 3.3Occupational Therapy Assistants
- 3.1Physical Therapist Aides



# The President's High Growth Job Training Initiative - Targeted Industries

- Advanced Manufacturing
- Aerospace
- Automotive
- Biotechnology
- Construction
- Energy
- Financial Services
- Geospatial Technology
- Health Care
- Homeland Security
- Hospitality
- Information Technology
- Retail
- Transportation



# Fastest Declining Occup. in USA

- -96,100Farmers, Ranchers, and Other Agricultural Managers
- -68,900Postal Service Mail Sorters, Processors, and Processing Machine
- -42,100Sewing Machine Operators
- -38,100Postal Service Mail Carriers
- -33,200Switchboard Operators, Including Answering Service
- -31,600Postal Service Clerks
- -19,100Cooks, Fast Food
- -15,900Data Entry Keyers
- -13,200Word Processors and Typists
- -13,000Textile Machine Setters, Operators, and Tenders
- -12,400Electrical, Electronics, and Electromechanical Assemblers
- -12,400Miscellaneous Plant and System Operators
- -11,500Door-to-Door Sales Workers, News and Street Vendors, and Rela
- -10,600Food Service Managers

### **States with Most New Jobs**

15,273,900United States	% change
1,996,020Texas	21.41Utah
1,652,300California	17.04Texas
679,770Georgia	15.58ldaho
597,930Virginia	15.41Georgia
548,420Illinois	14.90Virginia
438,110Florida	14.32Mississippi
419,680North Carolina	11.03Montana
310,090Utah	10.61Alabama
304,670Washington	10.46Alaska
287,050New York	10.21Oklahoma
266,410Indiana	10.15Nebraska
257,640Michigan	10.12 <b>United States</b>

### washingtonpost.com

### Now, the Real Test

College Grads Turn to Tests, Life Coaches For Help in Deciding What Comes Next

By Rachel Dry Washington Post Staff Writer Tuesday, May 22, 2007; HE01

College graduation day. Finals safely behind you. Time to take the first steps of the rest of your life. But first, how about one more test or counseling session, to tell you where to direct those steps?

Instead of rushing off to grad school or into the workforce, students graduating from college this spring are increasingly turning to personality tests and life coaches, say some career counselors, to match them with jobs that promise not just earning potential but a compatible lifestyle and a shot at happiness.

"You used to see a kid who had a father and mother who were both lawyers, so the kid thought they're supposed to go on and be a lawyer," says Jeffrey Hayes, co-president of CPP, publisher of two widely used personality and interest assessments -- the Myers-Briggs Type Indicator and the Strong Interest Inventory.

"But today, people come in and say, 'I don't want to be like my mom and dad. I want to do something that I really enjoy. I don't just want to work for a paycheck. I want to know more about myself.'

Two years ago, in response to requests from college career counseling offices, the company began offering

# On the Job Training Required

(2010 USA Median Average Salaries - 2020 High Demand)

- \$70,910Appren.Elevator Installers and Repairers \$62,450long OJTBusiness Operations Specialists, All Other \$58,620long OJTClaims Adjusters, Examiners, and Investigators \$58,030long OJTElectrical Power-Line Installers and Repairers \$57,640short OJTTransportation Inspectors \$56,580long OJTPurchasing Agents, Except Wholesale, Retail, ar \$56,490 mod OJTLoan Officers \$54,640Appren.Boilermakers \$53,540 mod OJTPolice and Sheriff's Patrol Officers \$52,440 mod OJTSales Representatives, Wholesale and Manufact \$52,140long OJTStationary Engineers and Boiler Operators \$51,980mod OJTRotary Drill Operators, Oil and Gas \$51,800short OJTLegal Support Workers, All Other
- \$50,850long OJTTelecommunications Line Installers and Repairer \$50,620short OJTSales Representatives, Services, All Other

# Associate Degree Required

(2010 USA Median Average Salaries - 2020 High Demand)

- \$94,400General and Operations Managers \$83,860Construction Managers \$74,980Radiation Therapists \$68,560 Nuclear Medicine Technologists \$68,250Dental Hygienists \$68,090Nuclear Technicians \$64,690Registered Nurses \$64,380Diagnostic Medical Sonographers \$54,340Radiologic Technologists and Technicians \$54,330Funeral Service Managers, Directors, Morticians, and Unc \$54,280Respiratory Therapists \$54,020Geological and Petroleum Technicians \$51,010Occupational Therapy Assistants
- \$49,410Cardiovascular Technologists and Technicians

\$49,690Physical Therapist Assistants

# Bachelor Degree Required

(2010 USA Median Average Salaries - 2020 High Demand)

```
$165,080Chief Executives
$119,260Architectural and Engineering Managers
$115,780Computer and Information Systems Managers
$114,080Petroleum Engineers
$112,800Marketing Managers
$103,910Financial Managers
$99,920 Nuclear Engineers
$99,180Human Resources Managers
$98,530Sales Managers
$94,180Software Developers, Systems Software
$91,810Public Relations and Fundraising Managers
$90,270Engineers, All Other
$89,170Training and Development Managers
$87,790Software Developers, Applications
$87,780Atmospheric and Space Scientists
```

# Doctorate/Professional Degree Required

(2010 USA Median Average Salaries - 2020 High Demand)

```
≥$166,400Physicians and Surgeons
≥$166,400Oral and Maxillofacial Surgeons
≥$166,400Orthodontists
$161,020Dentists, All Other Specialists
$141,040Dentists, General
$118,400Prosthodontists
$118,030Podiatrists
$112,760Lawyers
$111,570Pharmacists
$106,370Physicists
$100,660Computer and Information Research Scientists
$94,990Optometrists
$87,260Astronomers
$82,040Veterinarians
```

\$79,390Biochemists and Biophysicists

# Why LMI?

- Students Learn which careers will have openings when they are ready to join the workforce.
- Parents Help their children decide which career to pursue.
- Teachers Know which careers are in high demand so they can relate their teachings to careers. (Relevance)
- Businesses Give business people the data they need to discuss careers with our students. (Relationships)

# So where did all this data come from?



Crosswalks







Keyword or O\*NET-SOC Code:





O\*NET Sites

#### Search

### Find Occupations

Browse groups of similar occupations to explore careers. Choose from industry, field of work, science area, and more.



Help



+ onethttp://online.onetcenter.org/

**Find Occupations** 



Advanced Search

#### Advanced Search

Focus on occupations that use a specific tool or software. Explore occupations that need vour skills.





#### Crosswalks

Connect to a wealth of O\*NET data. Enter a code or title from another classification to find the related O\*NET-SOC occupation.

Apprenticeship





The green economy is changing tasks, skills, and jobs across the country. Discover important information for over 100 occupations going green.

Learn More









mttp://www.ncesc.com/

#### **Business Quick Links**

#### Individual Quick Links

- 2007 List of Charges
- Tax Rate Information
- 2008 Tax Rate Assignment
- UI Tax Alert
- Voluntary Contribution Calculator
- · Find a Job
- . File Weekly Certification
- . View your Claim Profile
- View your Benefit Payment History
- . Employer Websites Links New Listing: Google Data Center
- Real Life Tips
- View ESC Offices Special Hours





Michael F. Easley, Governor

Harry E. Payne, Jr., Chairman

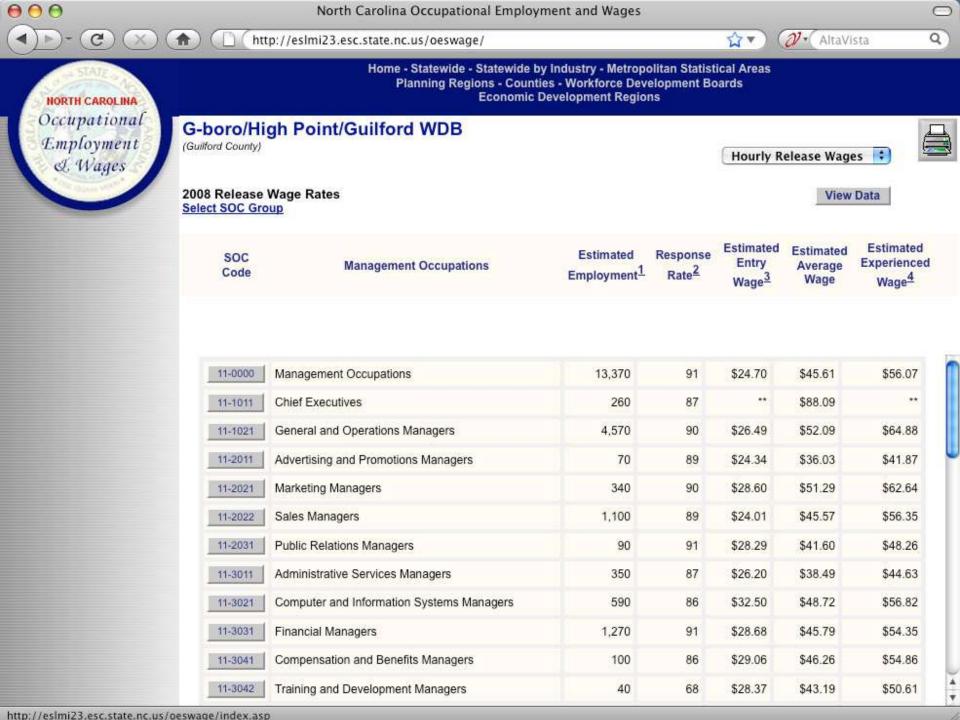


Business Services | Individual Services | Labor Market Information | Public & Media Information

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ESC Privacy Policy / Disclaimer

http://www.ncesc.com (f)



# But I'm not from North Carolina!





http://projectionscentral.com/







### Projections Central State Occupational Projections

Long Term Projections (Through 2018)

Short Term Projections (Coming Soon)



### **LMI Sources**

- Kuder
- Career Cruising
- Future For Kids
- Bridges Transitions
- XAP
- Career One Stop
- ASVAB
- My Plan

















### Career Outlook in the US

Knowing where the job openings are in the near future is the key to deciding on a postsecondary education that will prepare you for a rewarding career!

Welcome to Career Outlook dot U S.

This website allows you to obtain and sort various career data, also known as Labor Market Information.

For each state you can select to see a list of careers within one of the 16 career clusters or see a list of the careers in one of the six career interest categories. You can even select one from each menu to cross-reference career clusters and career interests. You can see ALL of the careers by immediately selecting the Search button.

Once you have your list of careers, you can change the sort order by selecting one of the column

### www.CareerOutlook.US

### The Career Planning Process

Start with a plan. A Career Plan gets you started on your way to a productive and rewarding career. After assessing your interests and skills, then explore the careers found here at Career Outlook dot U.S.

Take a RIASEC career interest assessment. Then explore careers that match your interests.

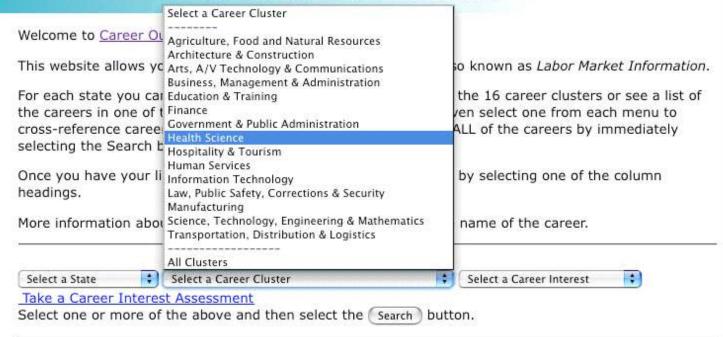






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http://www.careeroutlook.us/table.php?state=NC&cluster=hea&interest=all







### Career Outlook in the US

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Select a Career Cluster Select a State Select one or more of the above and then select the (Search) button.

Select a Career Interest

Take a Career Interest Assessment

Select an occupation below to see more details about that occupation. Select a column heading to sort the table by that column.

#### Health Science career cluster, in North Carolina

<u>occupation</u>	SOC code	interests	minimum education	growth outlook	<u>current</u> <u>workers</u>	salary entry	salary all
Attendants, Except Emergency Medical Technicians	53-3011.00	SRE	mod. OJT	2.08	720	\$17,120	\$23,850
<u>Anesthesiologists</u>	29-1061.00	IRS	Profess.	2.73	1,280	\$125,320	\$194,370
Athletic Trainers	29-9091.00	SREI	Bachelor	3.21	280	\$27,850	\$39,600
<u>Audiologists</u>	29-1121.00	SIR	Master	1.82	330	\$44,920	\$59,580
Cardiovascular Technologists and Technicians	29-2031.00	IRS	Associate	2.95	1,220	\$35,810	\$52,810
<u>Chiropractors</u>	29-1011.00	IRSAE	Profess.	3.24	1,020	\$54,990	\$101,500
Clinical, Counseling, and School Psychologists	19-3031.00	IS	Doctorate	2.65	3,240	\$39,060	\$63,510
Dental Assistants	31-9091.00	SRE	mod. OJT	3.6	7,110	\$23,510	\$34,200
D. J. Lill. St. St. I	20 2024 00	CODE			4 000	+4F 200	+64 600



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http://www.careeroutlook.us/career.php?id=292021&st=NC





AltaVista

# Career Outlook in the US

Knowing where the job openings are in the near future is the key to deciding on a postsecondary education that will prepare you for a rewarding career!

#### Dental Hygienists in North Carolina

#### (Higienistas bucodentales)

Dental Hygienists - Clean teeth and examine oral areas, head, and neck for signs of oral disease. May educate patients on oral hygiene, take and develop X-rays, or apply fluoride or sealants.

SOC (Standard Occupational Classification)	29-2021.00			
Career Interests	SCRE			
Minimum postsecondary education required	(Associate) Associate's degree - two-year degree program at a community college			
Growth Outlook (projected percentage growth in jobs per year from 2006-2016)	3.71 (high growth)			
Current number of workers in NC (2006)	4,800			
Average entry-level annual salary in NC (2008)	\$45,280			
Average annual salary for all workers in NC (2008)	\$61,680			
Average experienced-worker annual salary for all workers in NC (2008)	\$80,060			
Career Cluster	Health Science (Ciencia De la Salud)			
Major Occupational Group	Healthcare Practitioners and Technical			



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major occupational Group | nearthcare Practitioners and

data not available

Salaries over \$166,400 are sometimes shown as >\$166,400 rather than the actual salary.



## **Dental Hygienists**

O\*NET OnLine includes: Job Titles; Tasks; Knowledge; Skills; Abilities; Work Activities; Work Context; Job Zone; Interests; Work Styles; Work Values; Related Occupations; and Wages & Employment Trends.



## **Dental Hygienists**

America's Career InfoNet includes: Occupation Description; State and National Wages; State and National Trends; Knowledge, Skills, and Abilities; Tasks and Activities; Tools and Technology; Education and Training, Related Occupation Profiles, and Web Resources.



## Dental Hygienists

The Occupational Outlook Handbook from the US Department of Labor includes: Nature of the Work; Working Conditions; Training, Other Qualifications, and Advancement; Employment; Job Outlook; Earnings; Related Occupations; and Additional Information.



- Dental Hygienist : Flash :: MPEG :: Quicktime
- Health Services : Flash :: MPEG :: Quicktime
- (en Español) Higienista Dental : Flash :: Quicktime

### Career Videos

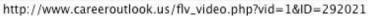
Flash videos should play in all web browsers. Ouicktime videos require Quicktime Movie Player.













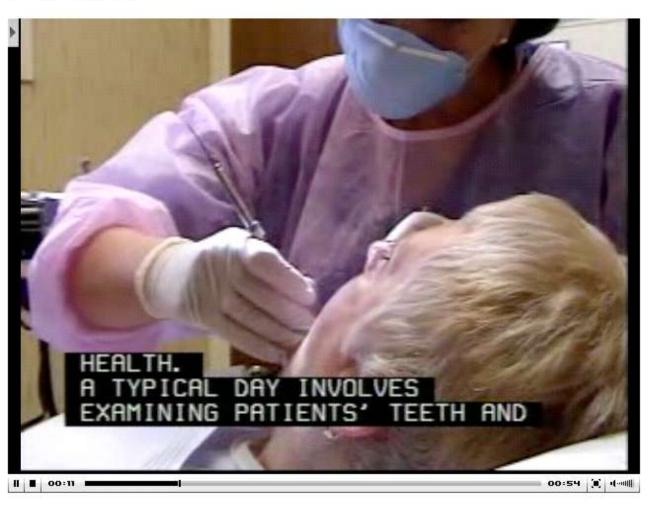


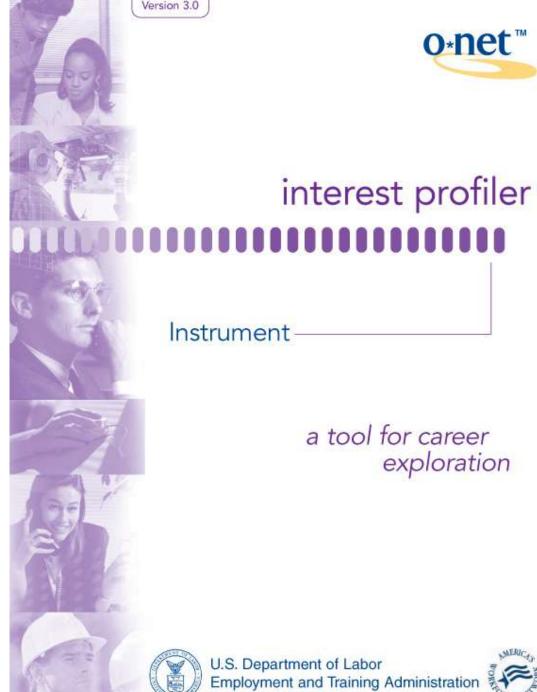


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## **Dental Hygienist**















http://www.careeroutlook.us/assessment/index.shtml







# Career Outlook in the US

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#### Interest Profiler

The Interest Profiler (career interest assessment) helps you find out what your interests are and how they relate to the world of work. It does this by asking you to answer questions that represent important interest areas. Your Interest Profiler scores will help you identify your strongest work-related interests. Knowing your work interests can help you decide what kinds of occupations and careers you want to explore.

You should use your Interest Profiler results to explore the world of work and identify occupations that can satisfy your particular interests. You will be able to look at the interests of workers in occupations and compare them to your own interests. Talk to your career development coordinator/facilitator/counselor for more help on how to use your Interest Profiler results.

The Interest Profiler questions describe work activities that some people do at their jobs. Read each question carefully and decide whether or not you would like to do the activity.

#### Try not to think about:

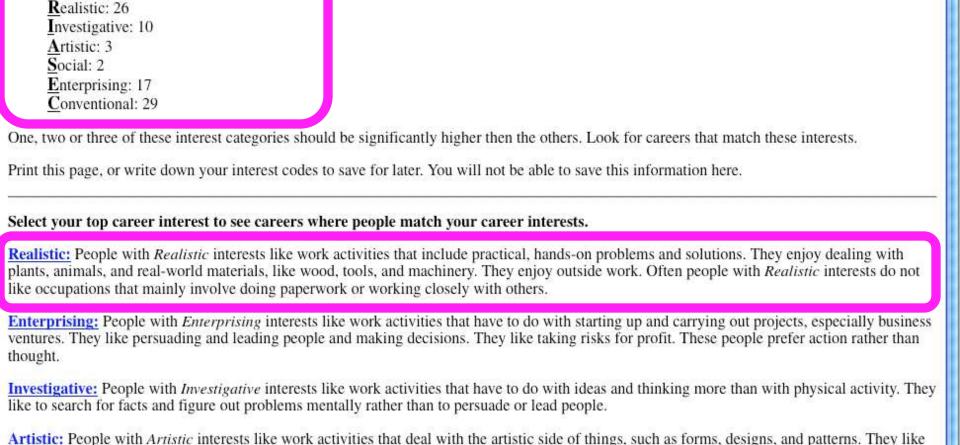
- · whether you have enough education or training to perform the activity, or
- · how much money you would make performing the activity.

Simply think about whether you would "like" or "dislike" performing the work activity.

#### Points to remember:

- This is not a test! There are no right or wrong answers to the questions. The goal is for you to learn more about your personal work-related interests.
- There is no time limit for completing the questions. Take your time.

(optional) Name:	1
(Optional, to identify your printout if printed on a group printer.)	



self-expression in their work. They prefer settings where work can be done without following a clear set of rules.

Social: People with Social interests like work activities that assist others and promote learning and personal development. They prefer to

communicate more than to work with objects, machines, or data. They like to teach, to give advice, to help, or otherwise be of service to people.

Conventional: People with Conventional interests like work activities that follow set procedures and routines. They prefer working with data and detail more than with ideas. They prefer work in which there are precise standards rather than work in which you have to judge things by yourself.

Interest Assessment Results

http://www.careeroutlook.us/assessment/assessment.php

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Done

Interest Profiler at www.CareerOutlook.US

John Smith, your career interests are as follows:









Knowing where the job openings are in the near future is the key to deciding on a postsecondary education that will prepare you for a rewarding career!

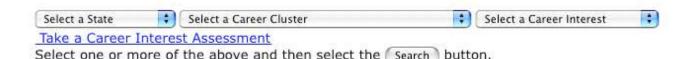
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# **Upsetting the Data**

- Recession
- Natural Disasters
- Immigration
- Automation
- Job relocation
- Elections





# **The Career Planning Process**

- 1. Assessments! Skill and interest inventories.
- 2. Do your homework! Research all careers.
- 3. Get out there! Job shadowing, internship, etc.
- 4. Talk to adults! Find out what they do.
- 5. Pick a career! An entry-level position.
- 6. Start a plan! Schooling, certification, background checks, or other requirements.
- 7. Choose elective classes based on career plan.
- 8. What's next? What does it take to get to the next level?

Help students discover their passion, then help them get on a pathway where they can turn that passion into a career.

**CLD** 

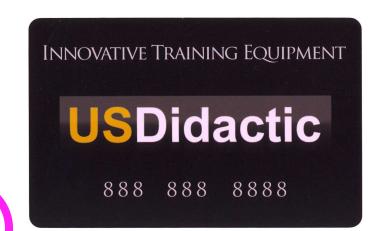


# Thanks for listening!

**Emil Barnabas** 

Emil@barnabas.com





# Please scan your Smart Card

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