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# Work Force: The Realities

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Isaac Lee ~ Kellie Reynolds ~ Adam Couldridge ~ Elias Vlastos

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# Chronology of Jobs in Wyoming (video)

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**Link:** [http://www.youtube.com/watch?v=3LbGNAOn\\_SM](http://www.youtube.com/watch?v=3LbGNAOn_SM)

## Talking Points:

- Tech advancements

- Aging

- National needs

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# Exodus of Wyoming's Young Workers (video)

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Link: <http://www.youtube.com/watch?v=STzOL72Mc5o>

## Talking Points:

Why do young people leave?

Why do the middle aged and elderly settle?

Where does this leave us?

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# ACADEMIES of NATRONA COUNTY

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- 4 Academies
  - Each Academy has a variety of Pathways
  - Pathways prepare students for after high school
    - : college/university
    - : workforce
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# Business - Agriculture - Natural Resources

	Potential Career	Related SOC Codes	Related SOC Titles	annual openings	growth from 2012 to 2022	annual pay	hourly wage
	Agriculture Scientist	19-1011	Animal Scientist	N/A	N/A	N/A	N/A
		19-1012	Food Scientists and Technologists	0	N/A	\$52877	N/A
		19-1013	Soil and Plant Scientists	17.1	40	N/A	\$29.11
	Food Scientist	19-1012	Food Scientists and Technologists #003	17.3	403	\$60555	\$28.54
Alex	Zoologist	19-1023	Zoologists and Wildlife Biologists	16	284	\$59365	
	Wildlife Biologist	19-1023	Zoologists and Wildlife Biologists	17	245	\$59356	\$27.86
	Environmental Scientist	19-2041	Environmental Scientists and Specialists, Including Health #002	17	88	\$61834	\$27.47
	Cartographer	17-1021	Cartographers and Photogrammetrists	17.7	30	\$57934	\$28.54
		17-3031	Surveying and Mapping Technicians	10.3	16	\$56982	\$27.64
	Environmental Engineer	17-2081	Environmental Engineer	14.4	N/A	\$59464	\$23.56
		17-3025	Environmental Engineering Technicians	6	20	N/A	\$30.95
	Food Service Manager	11-9051	Food Service Managers	1	7	\$58232	\$28
	Chef	35-1011	Chefs and Head Cooks	1	3	\$42468	\$20.42
	Head Cook	35-1011	Chefs and Head Cooks				
	Purchasing Manager	11-3061	Purchasing Manager	0	11	N/A	N/A
	Loan Officer	13-2072	Loan Officers	61	4	\$59164	\$28.44
Adam	Accountant	13-2011	Accountants and Auditors	2	5	\$64100	\$30.82
	Software Developer	15-1132	Software Developers, Applications	0	1	N/A	N/A
		15-1133	Software Developers, Systems Software	1	3	\$96555	\$46.42
	Computer Programmer	15-1131	Computer Programmers	3	-2	\$56653	\$27.24
	Network Architect	15-1143	Computer Network Architects	3	4	\$104254	\$50.12
	Business Manager	11-1021	General and Operations Managers	20	7	\$99854	\$48.01

# Creative Arts - Communication - Design

	Potential Career	Related SOC Codes	Related SOC Titles	annual openings	growth from 2012 to 2022	annual pay	hourly wage
Adam	Graphic Artist	27-1024	Graphic Designers	5	-15	\$29074	\$13.98
	Photographer	27-4021	Photographers	2	-5	\$28448	\$13.68
	Animator	27-1014	Multimedia Artists and Animators	1	-2	N/A	N/A
	Camera Operator	27-4031	Camera Operators, Television, Video, and Motion Pictures	0	0	N/A	N/A
	Interior Designer	27-1025	Interior Designers	3	4	\$51302	\$24.66
	Fashion Designer	27-1022	Fashion Designers	1	1	NA	NA
Eli	TV Reporter/Producer	27-2012	Producers and Directors	13	-3	\$57396	\$27.59
		27-3022	Reporters and Correspondents	24	-44	\$27723	\$13.33
	Copy Editor	27-3041	Editors	10	-11	\$40871	\$19.65
	Actor	27-2011	Actors	NA	NA	NA	NA
	Director	27-2012	Producers and Directors	Repeated	Repeated	Repeated	Repeated
		27-1011	Art Directors	0	1	NA	NA
		27-2041	Music Directors and Composers	3	3	\$49333	\$23.72
	Musician	27-2042	Musicians and Singers	2	5	NA	NA
	Dancer	27-2031	Dancers	NA	NA	NA	NA
	Museum Director	25-4012	Curators	5	15	\$49414	\$23.76
	Movie Producer	27-2012	Producers and Directors	Repeated	Repeated	Repeated	Repeated
	Web Designer	15-1134	Web Developers	10	18	\$54373	\$26.14
	Advertising Director	11-2011	Advertising and Promotions Managers	1	1	\$65265	\$31.38
	Artistic Director	27-1011	Art Directors	Repeated	Repeated	Repeated	Repeated

# Health Sciences - Human Services

Related SOC Titles	annual openings	growth from 2012 to 2022	annual pay	hourly wage
Chiropractors	9	23	\$63426	\$30.49
Oral and Maxillofacial Surgeons	1	N/A	N/A	N/A
Optometrists	9	25	\$87805	\$42.21
Pharmacists	3	8	\$114169	\$54.89
Anesthesiologists	8	25	\$257241	\$123.62
Family and General Practitioners	24	65	\$154251	\$74.16
Internists, General	9	19	\$208540	\$100.26
Obstetricians and Gynecologists	5	12	\$237526	\$114.19
Pediatricians, General	6	17	\$145176	\$69.8
Psychiatrists	N/A	N/A	\$215683	\$103.69
Surgeons	2	5	\$257300	\$123.7
Physicians and Surgeons, All Other	6	12	\$224893	\$108.12
Veterinarians	7	14	\$55407	\$26.64
Registered Nurses	449	849	\$67129	\$32.27
Nurse Anesthetists	4	5	\$235755	\$113.34
Nurse Midwives	N/A	N/A	N/A	N/A

# HSHS cont.

			Openings Now	Openings in 2022	Annual Wage	Hourly Wage
	25-2023	Career/Technical Education Teachers, Middle School	7	23	\$59503	N/A
	25-2031	Secondary School Teachers, Except Special and Career/Technical Education	175	686	\$60099	N/A
	25-2032	Career/Technical Education Teachers, Secondary School	26	96	\$59878	N/A
	25-2051	Special Education Teachers, Preschool	11	23	\$51551	N/A
	25-2052	Special Education Teachers, Kindergarten and Elementary School	47	174	\$57649	N/A
	25-2053	Special Education Teachers, Middle School	19	73	\$62686	N/A
	25-2054	Special Education Teachers, Secondary School	25	100	\$57633	N/A
	25-2059	Special Education Teachers, All Other	0	2	\$45861	N/A
Police Officer	33-3051	Police and Sheriff's Patrol Officers	81	193	\$51089	\$24.56
Detective	33-3021	Detectives and Criminal Investigators	11	24	\$72084	\$34.66
Social Worker	21-1021	Child, Family, and School Social Workers	63	152	\$45244	\$21.75
	21-1022	Healthcare Social Workers	17	27	\$47767	\$22.96
	21-1023	Mental Health and Substance Abuse Social Workers	27	64	\$43914	\$21.11
	21-1029	Social Workers, All Other	16	37	\$52114	\$25.05
Counselor	21-1011	Substance Abuse and Behavior Disorder Counselors	12	30	\$43391	\$20.86
	21-1012	Educational, Guidance, School, and Vocational Counselors	64	215	\$58051	\$27.91



# HSHS cont.

		21-1013	Marriage and Family Therapists #001	1,4	13	\$63825	\$30.69
		21-1014	Mental Health Counselors	15	86	\$52592	\$25.32
		21-1015	Rehabilitation Counselors	15	82	\$30750	\$14.79
Alex		21-1019	Counselors, All Other	N/A	N/A	N/A	N/A
	Psychologist	19-3031	Clinical, Counseling, and School Psychologists	15	152	\$45233	\$21.75
		19-3032	Industrial Psychologists	3	27	\$47767	\$22.96
		19-3039	Psychologists, All Other	6	63	N/A	N/A
				annual openings	growth from 2012 to 2022	annual pay	hourly wage

## Sources:

U.S. Office of Management and Budget, Standard Occupational Manual, 2010

L. Knapp, 10/10/2013, Research & Planning, WYDWS

# Architecture - Construction - Engineering - Mechanics

The Academy of Architecture, Construction, Manufacturing, and Engineering (ACME)						
Potential Career	Related SOC Codes	Related SOC Titles	annual openings	growth from 2012 to 2022	annual pay	hourly wage
Civil Engineer	17-2051	Civil Engineers	88	plus 139	\$70615	\$33.95
	17-3022	Civil Engineering Technicians	31	plus 63	\$44070	\$21.19
Survey Technician	17-1022	Surveyors	25	plus 47	\$59568	\$28.64
	17-3031	Surveying and Mapping Technicians	17	plus 39	\$44543	\$21.41
Architect	17-1011	Architects except Landscape and Naval	15	plus 17	\$68408	\$32.89
	17-3011	Architectural and Civil Drafters	24	plus 47	\$45828	\$22.03
Auto Service Tech	49-3023	Automotive Service Technicians and Mechanics	132	plus 318	\$40361	\$19.4
Auto Collision Tech	49-3021	Automotive Body and Related Repairers	30	plus 91	\$44773	\$21.53
Diesel Service Tech	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	154	plus 501	\$54713	\$26.3
Aerospace Engineer	17-2011	Aerospace Engineers	N/A	N/A	N/A	N/A
	17-3021	Aerospace Engineering and Operations Technicians	N/A	N/A	N/A	N/A
Electrical Engineer	17-2071	Electrical Engineers	20	plus 50	\$59038	\$33.19
	17-3023	Electrical and Electronics Engineering Technicians	8	plus 19	\$62926	\$30.25
Mechanical Engineer	17-2141	Mechanical Engineers	26	plus 71	\$82085	\$39.46
	17-3027	Mechanical Engineering Technicians	2	plus 7	\$47013	\$22.6
Machine Installer	31-9093	Medical Equipment Preparers	5	plus 15	\$30343	\$14.59

# ACME cont.

47-2011	Boilermakers	5	plus 20	\$ 58,557	\$ 28.15
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	163	plus 392	\$ 65,348	\$ 31.42
49-2011	Computer, Automated Teller, and Office Machine Repairers	13	plus 25	\$ 37,552	\$ 18.05
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairers	4	plus 21.3	NA	NA
49-2022	Telecommunications Equipment Installers and Repairers, Except Line	12	plus 27	NA	NA
49-2091	Avionics Technicians	0	plus 24.7	NA	NA
49-2092	Electric Motor, Power Tool, and Related Repairers	3	plus 42.4	\$ 49,398	\$ 23.75
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	1	plus 2	NA	NA
49-2096	Electrical and Electronics Repairers, Motor Vehicles	0	neg. 33	NA	NA
49-2097	Electronic Home Entertainment Installers and Repairers	1		0 NA	NA
49-2098	Security and Fire Alarm Systems Installers	8	plus 18	\$ 42,113	\$ 20.25
49-3041	Farm Equipment Mechanics and Service Technicians	7	plus 20	\$ 40,492	\$ 19.47
49-9011	Mechanical Door Repairers	0	neg. 11.4	NA	NA
49-9012	Control and Valve Installers and Repairers, Except Mechanical Doors	21	plus 55	\$ 60,648	\$ 29.16
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	77	plus 96	\$ 39,147	\$ 18.82
49-9031	Home Appliance Installers	2	neg 6.7	NA	NA

# ACME cont.

		49-9041	Industrial Machinery Mechanics	221	34%	55686	26.77
		49-9043	Maintenance Workers, Machinery	44	28.4%	46085	22.16
		49-9044	Millrights	26	23.4%	58146	27.95
		49-9051	Electrical Power Line Installers and Repairers	36	10.2%	72037	34.63
		49-9052	Telecommunication Line Installers and Repairers	41	15.7%	45068	21.67
		49-9091	Coin, Vending, and Amusement Machine Installers and Repairers	2	6.3%	32677	15.71
		49-9097	Signal and Track Switch Repairers	N/A	n/a	n/a	n/a
		49-9099	Installation, Maintenance, and Repair Workers, All Other	23	27.1	50181	24.13
Abe		51-2031	Engine and Other Machine Assemblers	0	58.7	n/a	n/a
	Tool Maker	51-4041	Machinists	50	23.8	43837	21.08
		51-4111	Tool and Die Makers	1	-5.4	48959	23.54
	Chemical Engineer	17-2041	Chemical Engineer	n/a	n/a	n/a	n/a
	Welder	51-4121	Welders, Cutters, Solderers, and Brazers	49	38.7	53732	25.83
		51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	10	23.9	42226	20.3
	Construction Manager	11-9021	Construction Managers	72	4	81836	39.34
	Building Trades	47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	555	21.4	64541	31.03

# ACME cont.

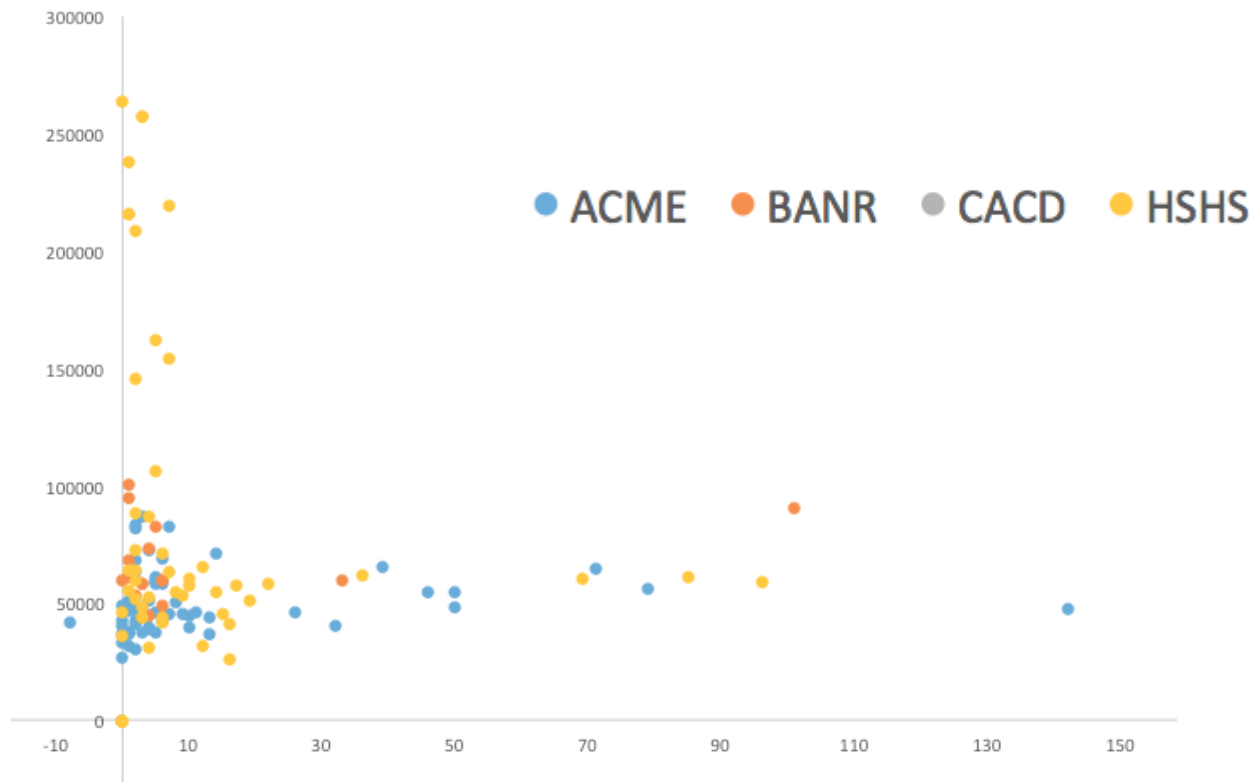
47-2021	Brickmasons and Blockmasons	2	24	\$47350	\$22.76
47-2022	Stonemasons	0	1	N/A	N/A
47-2031	Carpenters	-8	-78	\$41481	\$19.94
47-2041	Carpet Installers	0	-2	\$26243	\$12.63
47-2044	Tile and Marble Setters	1	9	\$39704	\$17.83
47-2047	Floor Layers, Except Carpet, Wood, and Hard Tiles	0	4	\$25050	\$12.04
47-2051	Cement Masons and Concrete Finishers	13	132	\$36364	\$17.48
47-2073	Operating Engineers and Other Construction Equipment Operators	142	25	\$47302	\$22.74
47-2081	Drywall and Ceiling Tile Installers	4	44	\$36361	\$18.55
47-2111	Electricians	46	plus 132	\$54204	\$26.06
47-2121	Glaziers	1	11	\$36292	\$17.45
47-2131	Insulation Workers, Floor, Ceiling, and Wall	4	10	\$37298	\$17.93
47-2141	Painters, Construction and Maintenance	5	46	\$37292	\$17.94
47-2152	Plumbers, Pipefitters, and Steamfitters	10	99	\$44353	\$21.32
47-2211	Sheet Metal Workers	4	35	\$39589	\$19.03
47-2221	Structural Iron and Steel Workers	1	14	\$46574	\$22.39

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	47-2171	Reinforcing Iron and Rebar Workers	1	0	N/A	N/A
	47-4011	Construction and Building Inspectors	1	2	N/A	N/A
	47-4099	Construction and Related Workers, All Other	0	0	N/A	N/A
Airline Management	11-3071	Transportation, Storage, and Distribution Managers	1	1	N/A	N/A
	43-1011	First-Line Supervisors of Office and Administrative Support Workers	Cant find	Cant find	Cant find	Cant find
	53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	Cant find	Cant find	Cant find	Cant find
Computer Hardware Engineer	17-2061	Computer Hardware Engineers	0	0	N/A	N/A
Source: U.S. Office of Management and Budget, Standard Occupational Classification Manual, 2010						
L. Knapp, 10/10/2013, Research & Planning, WYDWS						

# Academy Outlook . . .

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# Alex: Firefighter

Student loans... Hathaway Scholarship... Finances...

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Salary - Between \$55,650 yearly (without overtime)  
or \$4,583 a month

Location - Boulder, Colorado

Education - Fire Science at Casper College and more...

Skills - As listed

Monthly Costs - Around \$2,550

Income tax bracket 2013: 25.7%

Saved per Month - \$1,833

Job Growth - Varies on population...





# Soft Skills for the Workforce

## How does school prepare you for these?

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- Communication (formal & informal)
  - Decision Making
  - Showing Commitment (long and short term)
  - Flexibility (when you must change plans)
  - Time Management (handling a 'full plate')
  - Leadership Skills (in a group . . .)
  - Creativity/Problem-Solving (thinking 'outside the box')
  - Being a team player (making the most of each other's strengths)
  - Accepting Responsibility (accountability to self, others, and outcomes)
  - Ability to work under pressure (deadlines and expectations)
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# Design Camp

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*prototype*

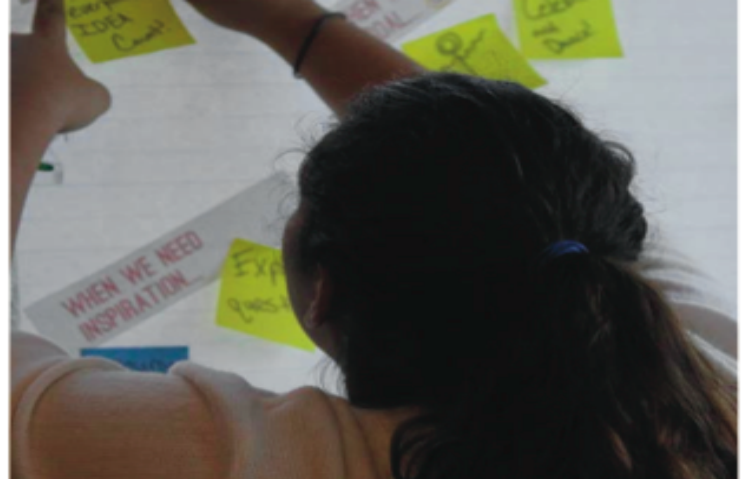
DESIGN LAB



WHAT IS DESIGN?



MINI-TEAM CHALLENGE



## HOW CAN TEENS IMPACT CASPER?

"See a need, fill a need."  
- Heather

"Foundations of cool people  
are already here."  
- Chelsey

HOOK THEM IN.  
ILLUSTRATE THE IDEA.  
EXPLAIN WHY IT MATTERS.



"Create yourself, put yourself out in the world"  
- Chelsey



# Workforce Education Around the Globe



**Thank you for your time . . .**

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**. . . Any questions?**

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