

What Is Human Capital?

Human capital includes the knowledge, skills, experience, and attitudes necessary for success.

Human Capital Needed for These Occupations:

Pilot	Marine Biologist	Web Designer	TV Reporter

Human Capital Score Sheet

		Group A	Group B
Round One	0:00 to 1:00 minute		
	1:01 to 2:00 minutes		
	2:01 to 3:00 minutes		
	3:01 to 4:00 minutes		
	4:01 to 5:00 minutes		
	5:00 max minutes		
Round Two (the optional activity)	0:00 to 1:00 minute		
	1:01 to 2:00 minutes		
	2:01 to 3:00 minutes		
	3:01 to 4:00 minutes		
	4:01 to 5:00 minutes		
	5:00 max minutes		

Questions

Who solved the codes faster? Why?

What can you say about the effect of information and knowledge on human capital?

If you completed Round 2, what can you say about the effect of experience on human capital?

Answer to Demand for Workers in Various Occupations

A: Industry	B: Actual # employed in 2006	C: Projected # employed in 2016	D: Change in Number (Column C – Column B) indicate + or -	E: Percent change (Column D/Column B x 100) indicate + or -
Registered nurses	2,505,000	3,092,000	587,000	23.4
Retail salesperson	4,477,000	5,034,000	557,000	12.4
Customer service rep	2,202,000	2,747,000	545,000	24.8
Food prep and serving	2,503,000	2,955,000	452,000	18.1
Office clerks	3,200,000	3,604,000	404,000	12.6
Personal & home care aides	767,000	1,156,000	389,000	50.7
Home health aides	787,000	1,171,000	384,000	48.8
Postsecondary teachers	1,672,000	2,054,000	382,000	22.8
Nursing aides, orderlies	1,447,000	1,711,000	264,000	18.2
Bookkeeping & accounting clerks	2,114,000	2,377,000	263,000	12.4
Waiters and waitresses	2,361,000	2,615,000	254,000	10.8
Child care workers	1,388,000	1,636,000	248,000	17.9
Administrative assistants	1,618,000	1,857,000	239,000	14.8
Computer software engineers	507,000	733,000	226,000	44.6
Accountants and auditors	1,274,000	1,500,000	226,000	17.7
Landscaping workers	1,220,000	1,441,000	221,000	18.1
Elementary school teachers	1,540,000	1,749,000	209,000	13.6
Receptionists and information clerks	1,173,000	1,375,000	202,000	17.2
Truck drivers, heavy & tractor-trailer	1,860,000	2,053,000	193,000	10.4
Maids and housekeeping cleaners	1,470,000	1,656,000	186,000	12.7
Security guards	1,040,000	1,216,000	176,000	16.9
Carpenters	1,462,000	1,612,000	150,000	10.3
Management analysts	678,000	827,000	149,000	22.0
Medical assistants	417,000	565,000	148,000	35.5
Computer systems analysts	504,000	650,000	146,000	29.0
Network systems analysts	262,000	402,000	140,000	53.4
Teacher assistants	1,312,000	1,449,000	137,000	10.4
Veterinarians	62,000	84,000	22,000	35.5
Financial analysts	221,000	295,000	74,000	33.5
Social & human service assistants	339,000	453,000	114,000	33.6
Physical therapy assistants	60,000	80,000	20,000	33.3
Pharmacy technicians	285,000	376,000	91,000	31.9
Forensic science technicians	13,000	17,000	4,000	30.8
Dental hygienists	167,000	217,000	50,000	29.9

Answer to Demand for Workers in Various Occupations

A: Industry	B: Actual # employed in 2006	C: Projected # employed in 2016	D: Change in Number (Column C – Column B) indicate + or -	E: Percent change (Column D/Column B x 100) indicate + or -
Mental health counselors	100,000	130,000	30,000	30.0
Dental assistants	280,000	362,000	82,000	29.3
Database administrators	119,000	154,000	35,000	29.4
Physical therapists	173,000	220,000	47,000	27.2
Manicurists and pedicurists	78,000	100,000	22,000	28.2
Environmental science protection techs	36,000	47,000	11,000	30.6
Physician assistants	66,000	83,000	17,000	25.8
Stock clerks and order fillers	1,705,000	1,574,000	-131,000	-7.7
Cashiers, except gaming	3,500,000	3,382,000	-118,000	-3.4
Packers and packagers, hand	834,000	730,000	-104,000	-12.5
File clerks	234,000	137,000	-97,000	-41.5
Farmers and ranchers	1,058,000	969,000	-89,000	-8.4
Order clerks	271,000	205,000	-66,000	-24.4
Sewing machine operators	233,000	170,000	-63,000	-27.0
Telemarketers	395,000	356,000	-39,000	-9.9
Computer operators	130,000	98,000	-32,000	-24.6
Word processors and typists	179,000	158,000	-21,000	-11.7
Computer programmers	435,000	417,000	-18,000	-4.1
Switchboard operators	177,000	163,000	-14,000	-7.9
Tile and marble setters	79,000	91,000	12,000	15.2
Plumbers, pipefitters, steamfitters	502,000	555,000	53,000	10.6
Firefighters	293,000	328,000	35,000	11.9
Medical equipment repairers	38,000	46,000	8,000	21.1
Embalmers	9,000	10,000	1,000	11.1
Nuclear medicine technologists	20,000	23,000	3,000	15.0
Paralegals and legal assistants	238,000	291,000	53,000	22.3
Cardiovascular technologists	45,000	57,000	12,000	26.7
Interior designers	72,000	86,000	14,000	19.4

Source: Bureau of Labor Statistics, Table 5. The 30 occupations with the largest employment growth, 2006-2016. Bureau of Labor Statistics, Table 6. The 30 fastest-growing occupations, 2006-2016. Bureau of Labor Statistics, Table 8. The 30 occupations with the largest employment declines, 2006-2016. Bureau of Labor Statistics, Table I-5. Above-average growth and above-average wage occupations, by educational attainment cluster and wages, 2006 and projected 2016. Note: these data are updated periodically, as part of the Bureau of Labor Statistics' Employment Projections program. For current updates, see www.bls.gov/news.release/ecopro.toc.htm.

SCANS Skills

The Secretary's Commission on Achieving Necessary Skills (SCANS) report, from the U.S. Department of Labor, presented a national model of skills that every worker needs in order to be productive and successful.

The SCANS skills include the following:

Basic Skills:

- Reading
- Writing
- Math
- Listening

Other Skills:

- Interpersonal skills
- Team work
- Use of technology and other resources
- Communication (oral and written)
- Problem solving
- Organizational skills
- Positive attitude/good work ethic

The SCANS list provides one set of terms for describing a person's "human capital": The knowledge, skills, experience and attitudes he or she may possess.

The Role of Entrepreneurs in the Economy

Entrepreneurs are innovators:

- They observe an opportunity.
- They create new goods and services.
- They improve existing products.

Entrepreneurs provide choice:

- They add goods and services to the marketplace.
- They offer variety.
- They design different approaches to familiar problems.

Entrepreneurs provide jobs:

- They hire workers for their businesses.
- They consume resources, thus providing jobs in the industries that supply those resources.

Entrepreneurs help the economy grow.

Lesson 5 Assessment: Answer Key

WHAT'S WRONG WITH THIS PICTURE?

Have the students complete **Lesson 5 Assessment** in the *Student Workbook*, working independently. (Sample answers are given below in bold.)

Read the story below, and underline every statement that illustrates habits that will NOT prepare Kelly for a successful career. HINT: You should find more than 12 mistakes. Then, above each incorrect statement, write the letter of the SCANS skill that Kelly is lacking.

Choose from these SCANS skills:

- A. Reading, writing and math
- B. Interpersonal skills
- C. Teamwork
- D. Use of technology
- E. Oral communication
- F. Problem solving
- G. Good work ethic/on time/good attitude
- H. Organizational skills

Kelly is a seventh-grader at Middleville Middle School. Her first class begins at 8:05, so she sets her alarm for 7:30. That way she's out of the kitchen door at 7:50 and **ready for her 20-minute walk to school.** (G) Yesterday, when she entered the building, she saw the principal, Ms. Ramirez.

"Yo," (E) Kelly shouted. "What's happenin'?"

"You're late, Kelly," said the principal, frowning.

"Whatever!" (E) replied Kelly, and she raced down the hall.

In class, Kelly ruffled through her book bag but **could not find any pens, pencils, or paper.** (H) When Mr. Choy asked for her math assignment, she didn't have that either.

"You'll have to go to the office," Mr. Choy told her.

In the principal's office, Kelly was asked to answer the phone while one of the secretaries stepped out. When the phone rang, Kelly picked it up.

"Hey, man, this is Middleville school. Whaddya want?" (E) she said.

The caller hung up, but Kelly could not figure out why. She decided to leave a note for the secretary. It said: **"Deer Sekretery, Somebody called and hung up. I don't no who it was."** (A)

When the phone rang again, Kelly picked it up and said, **"Whooze zis?"** (E)

"Please have Ms. Ramirez call the superintendent's office by 9:30," the caller said.

"Okay, okay," Kelly said. On a piece of scrap paper she wrote: **"Ms. Ramirez - go to the custodian's office after 9:30."** (A)

"Kelly, you need to keep a good record of the calls," said the school clerk.

"You can't tell me what to do," shouted Kelly. **"I'm doin' ya a favor by helpin' ya out."** (B)

The next day when Kelly woke up, it was dark in her bedroom. She flipped the switch about ten times, but her lamp would not light.

"Hey, what's wrong with my lamp?" she yelled to her mother.

"Maybe the bulb burned out," her mother suggested.

"Oh, I never thought of that," (F) said Kelly.

Kelly had not done her homework, so she decided not to go to school. **"Let's see, that's 15 days absent so far this year. That ain't too bad."** (G)

When Kelly returned to school her social studies teacher, Ms. Musielewicz, sent her to the computer lab to do some research for a big project. In the lab, Kelly was clueless. **She did not even know how to turn on the computer. (D)** The lab assistant tried to help her, but Kelly just shrugged.

“I took that stupid computer class last year, but I didn’t like it. Besides, I’m gonna be a mechanic when I’m done with school. **I don’t need no computer skills.**” (E)

Finally, it was the last period of the day—gym class. The substitute teacher was assigning the students to teams for basketball. When Kelly got the ball, she dribbled down the floor and tried to shoot, even though she was surrounded by players from the other team.

“Pass. Pass the ball!” shouted the teacher.

But Kelly just tried to shoot again, and she was blocked by another player. Every time she got the ball, Kelly tried to shoot. **She never passed to another player. (C)**

When the bell rang at the end of the day, Kelly grabbed her book bag and ran out of the building. On the way home she stopped at the store and bought a candy bar for 55 cents, giving the clerk a \$1 bill.

“With tax, that’s 59 cents. Your change is 31 cents,” the cashier said, handing Kelly a quarter, a nickel and a penny.

“Hey,” said another shopper. “That’s not the right change.”

“Sure it is,” shrugged Kelly. **“It must be. The man said it was.” (A)**

When Kelly got home, her mother asked how things went at school.

“All right, I guess,” she replied. “But I can’t wait to finish school and get a job. Then I can do anything I want.”

Give Kelly some advice for how to improve her human capital and increase her chances for a successful career.