

Job Skills Most Needed Across All Occupations

Job Skills Overview

Job skills are personal abilities that help workers carry out job-related tasks. However, depending on the occupation, the required skills can be very different. For instance, construction workers need a unique set of skills different from accountants, teachers, or production workers.

Some of the most important job skills come as second nature to employees. The ability to listen well, show up to work on time, to take and apply instructions, and to maintain focus for long periods of time are critical to success in almost any workplace. Basic phone courtesy and computer and e-mail skills fall in this category. Most of the time, these sorts of skills are assumed: that is, employers expect employees to have them. People who struggle with these basic skills or job requirements can take part in what is known as "skills workshops." These sorts of workshops are often held at local job centers, community colleges or non-profit centers. These types of skills are not the focus here.

Rather the focus is on the skills that employers list as "required" or "desired" in position announcements and specific to the sort of work at issue. A corporate manager, for instance, may need to demonstrate meeting leadership skills and lawyers will need to show that they are persuasive. Specialized job skills like this can be thought of as adjectives and short phrases describing how successful employees do their jobs.

Fortunately, these required skills can be summarized across different occupational groups. Using data compiled from the Occupational Information Network (ONET), skills can be categorized into four useful groups that can aid in training and career planning and transitions. The four types of job skills discussed here are: Knowledge Areas, General Work Activities, Detail Work Activities, and Tools & Technologies.

A Knowledge Area is a key educational or experience requirement for an occupation (e.g. Computers and Electronics).

General Work Activities are types of job behaviors that occur across multiple occupations (e.g. interacting with computers).

Detailed Work Activities are types of specific job behaviors or duties particular to an occupation (e.g. use computers to enter, access or retrieve data).

Tools & Technologies are machines, equipment, tools, and information technologies that one could be expected to use in a particular occupation (e.g. Microsoft Access).

In many occupations, prior experience can itself be an essential job skill. People who have held similar jobs in the past are often uniquely qualified to continue, or to expand into new occupations. Many essential at-work skills are transferable to what are called related occupations, which mean that they can easily be applied to a variety of different jobs.

Knowledge Areas

(Total of 33 – all listed below)

650 occupations were analyzed and the knowledge area, "English Language," was found needed in 70 percent of all occupations (454/650).

Knowledge Areas are key educational or experience requirements for an occupation (e.g. Computers and Electronics).

Knowledge Area	Occupations Requiring	Pct.
English Language	454	70%
Customer and Personal Service	397	61%
Mathematics	395	61%
Administration and Management	332	51%
Computers and Electronics	307	47%
Education and Training	291	45%
Clerical	286	44%
Public Safety and Security	243	37%
Mechanical	238	37%
Law and Government	201	31%
Engineering and Technology	186	29%
Psychology	185	28%
Production and Processing	185	28%
Communications and Media	171	26%
Design	151	23%
Personnel and Human Resources	150	23%
Economics and Accounting	120	18%
Sales and Marketing	118	18%
Physics	117	18%
Chemistry	114	18%
Building and Construction	105	16%
Transportation	96	15%
Sociology and Anthropology	95	15%
Therapy and Counseling	87	13%
Telecommunications	86	13%
Biology	83	13%
Medicine and Dentistry	71	11%
Geography	65	10%
Philosophy and Theology	56	9%
Food Production	34	5%
Fine Arts	34	5%
History and Archeology	32	5%
Foreign Language	10	2%

Source: CWIA analysis of Occupation Information Network (O*NET) data.

General Work Activities

(Total of 41 – all listed below)

651 occupations were analyzed and the general work activity, "Getting Information," was found in 96 percent of all occupations (624/651).

General Work Activities are types of job behaviors that occur across multiple occupations (e.g. interacting with computers).

General Work Activity	Occupations Requiring	Pct.
Getting Information	624	96%
Identifying Objects, Actions, and Events	536	82%
Monitor Processes, Materials, or Surroundings	488	75%
Communicating with Supervisors, Peers, or Subordinates	481	74%
Making Decisions and Solving Problems	469	72%
Establishing and Maintaining Interpersonal Relationships	412	63%
Updating and Using Relevant Knowledge	408	63%
Evaluating Information to Determine Compliance with Standards	400	61%
Documenting/Recording Information	399	61%
Processing Information	386	59%
Organizing, Planning, and Prioritizing Work	381	59%
Judging the Qualities of Things, Services, or People	364	56%
Communicating with Persons Outside Organization	355	55%
Handling and Moving Objects	346	53%
Inspecting Equipment, Structures, or Material	330	51%
Analyzing Data or Information	321	49%
Performing General Physical Activities	308	47%
Interacting With Computers	291	45%
Interpreting the Meaning of Information for Others	286	44%
Thinking Creatively	280	43%
Performing for or Working Directly with the Public	272	42%
Estimating the Quantifiable Characteristics of Products, Events, or Information	259	40%
Scheduling Work and Activities	253	39%
Training and Teaching Others	252	39%
Controlling Machines and Processes	248	38%
Coordinating the Work and Activities of Others	245	38%
Resolving Conflicts and Negotiating with Others	209	32%
Performing Administrative Activities	200	31%
Developing Objectives and Strategies	198	30%
Developing and Building Teams	180	28%

General Work Activity	Occupations Requiring	Pct.
Assisting and Caring for Others	174	27%
Coaching and Developing Others	173	27%
Provide Consultation and Advice to Others	173	27%
Guiding, Directing, and Motivating Subordinates	152	23%
Repairing and Maintaining Mechanical Equipment	118	18%
Operating Vehicles, Mechanized Devices, or Equipment	108	17%
Monitoring and Controlling Resources	104	16%
Selling or Influencing Others	96	15%
Drafting, Laying Out, and Specifying Technical Devices, Parts, and Equipment	57	9%
Repairing and Maintaining Electronic Equipment	55	8%
Staffing Organizational Units	37	6%

Source: CWIA analysis of Occupation Information Network (O*NET) data.

Detailed Work Activities

(Total of 2,122 - top 10% listed below)

665 occupations were analyzed and the detailed work activity, "use hand or power tools," was found needed in 33 percent of all occupations (218/665).

Detailed Work Activities are types of specific job behaviors or duties particular to an occupation (e.g. use computers to enter, access or retrieve data).

Detailed Work Activity	Occupations Requiring	Pct.
use hand or power tools	218	33%
use oral or written communication techniques	215	32%
direct and coordinate activities of workers or staff	180	27%
use computers to enter, access or retrieve data	176	26%
maintain records, reports, or files	167	25%
understand technical operating, service or repair manuals	156	23%
communicate technical information	154	23%
read technical drawings	152	23%
prepare reports	142	21%
move or fit heavy objects	139	21%
read blueprints	133	20%
read work order, instructions, formulas, or processing charts	132	20%
fabricate, assemble, or disassemble manufactured products by hand	125	19%
adhere to safety procedures	117	18%
use interpersonal communication techniques	114	17%
make presentations	108	16%
provide customer service	99	15%
use precision measuring tools or equipment	99	15%
use public speaking techniques	99	15%
measure, weigh, or count products or materials	98	15%
examine products or work to verify conformance to specifications	97	15%
advise clients or customers	94	14%
use word processing or desktop publishing software	91	14%
clean equipment or machinery	90	14%
maintain production or work records	90	14%
use knowledge of investigation techniques	90	14%
use library or online Internet research techniques	88	13%
use spreadsheet software	87	13%
use scientific research methodology	84	13%
develop policies, procedures, methods, or standards	83	12%
read specifications	80	12%
obtain information from individuals	75	11%
confer with engineering, technical or manufacturing personnel	74	11%
use interviewing procedures	74	11%
adjust production equipment/machinery setup	73	11%
prepare technical reports or related documentation	73	11%
monitor production machinery/equipment operation to detect problems	72	11%

Detailed Work Activity	Occupations Requiring	Pct.
direct and coordinate scientific research or investigative studies	71	11%
analyze scientific research data or investigative findings	69	10%
advise governmental or industrial personnel	67	10%
clean rooms or work areas	67	10%
make decisions	67	10%
perform safety inspections in industrial, manufacturing or repair setting	67	10%
use teaching techniques	67	10%
develop plans for programs or projects	66	10%
explain complex mathematical information	66	10%
use relational database software	66	10%
assign work to staff or employees	64	10%
collect scientific or technical data	64	10%
operate hoist, winch, or hydraulic boom	64	10%
perform safety inspections in manufacturing or industrial setting	64	10%
write research or project grant proposals	64	10%

Source: CWIA analysis of the Occupation Information (O*NET) data.

Tools & Technologies

(Total of 2,109 - top 5% listed below)

220 occupations were analyzed and the tool/technology, "personal computer," was found needed in 75 percent of all occupations (165/220).

Tools & Technologies are machines, equipment, tools, and information technologies that one could be expected to use in a particular occupation (e.g. Microsoft Access).

Tool or Technology	Occupations Requiring	Pct.
Personal computers	165	75%
Data base user interface and query software	153	70%
Desktop computers	139	63%
Spreadsheet software	138	63%
Word processing software	138	63%
Notebook computers	121	55%
Internet browser software	98	45%
Office suite software	82	37%
Analytical or scientific software	81	37%
Electronic mail software	79	36%
Hammers	74	34%
Project management software	73	33%
Presentation software	72	33%
Screwdrivers	65	30%
Personal digital assistant PDAs or organizers	64	29%
Laser printers	62	28%
Power drills	62	28%
Power saws	60	27%
Accounting software	57	26%
Computer aided design CAD software	55	25%
Adjustable wrenches	54	25%
Graphics or photo imaging software	54	25%
Tape measures	54	25%
Utility knives	54	25%
Calendar and scheduling software	52	24%
Ladders	49	22%
Forklifts	47	21%
Saws	46	21%
Hoists	45	20%
Scaffolding	45	20%
Air compressors	44	20%
Enterprise resource planning ERP software	44	20%
Scanners	44	20%
Levels	43	20%
Power grinders	43	20%

Source: CWIA analysis of Occupation Information Network (O*NET) data.