Occupational Characteristics

What, How, Who in the Workplace

Activities involved in work

101 Deal with people in a business setting
102 Share ideas or knowledge with people
103 Deal with and help people
104 Work with machines or equipment
105 Work primarily with tools or objects
106 Follow set routine/a best way to work
107 Work with plants/animals/often outside
108 Work with scientific/technical things
109 Use creativity to develop new ideas
110 Evaluate people/products, make decisions

Methods used in work

121 Regular Tasks (Structured): A substantial portion of the activities making up the occupation are clearly defined. Specific work procedures or specific instructions must be followed to perform successfully. Consistency, accuracy of measurement, or keeping precise records may be required.

122 Creative: A substantial portion of activities require developing new solutions to complete tasks. Requires finding new procedures and designs to produce products or thinking up new themes or new ideas to accomplish tasks.

123 Problem-Solving: Emphasis in the occupation is on the choice of one single solution to a problem with many alternative solutions. A great deal of judgment may be required to reach a decision when only minimal information is available. Quick decisions may be required and decisions may be of great importance to others. The occupation often causes workers to feel a great deal of stress.

What or who involved in work

131 Data: working with facts, making judgments or decisions based on actual measurements
132 People: directing, helping, or influencing people
133 Objects: operating machines, using tools, materials, or equipment to perform tasks
134 Ideas: using knowledge or concepts to solve problems, making judgments or decisions based on personal viewpoints
135 Living Things: working with or caring for plant or animals

Skills or Aptitudes Used in Work

General aptitudes

141 Verbal: Ability to understand words, to know their meaning and be able to present ideas and information clearly; to communicate effectively with other people

142 Numerical: Ability to do mathematical problems quickly and accurately: add, subtract, multiply, divide, and use and understand fractions and percentages

143 Visual: Ability to see colors, details, and relationships among objects (includes 144, 145, 146, 151)

Special aptitudes – senses, movement

144 Spatial: Ability to understand the relationship of solid objects to those on a flat plane; must be able to see two- and three-dimensional objects and understand forms in space

145 Form Perception: Ability to see details clearly in pictures, objects, photographs, or printed materials and make visual comparisons between the shapes and details which you see

146 Color Discrimination: Ability to see small differences in colors and intensity of colors

147 Coordination: Ability to work with hands, fingers, or feet easily, quickly, and accurately

148 Motor Coordination: Ability to coordinate movements of eyes, fingers, and hands quickly and accurately, while working

149 Finger Dexterity: Ability to use fingers with skill and precision, as in using a typewriter or playing a musical instrument

150 Manual Dexterity: Ability to use hands with skill and precision, as in handling small objects or using tools

151 Eye-Hand-Foot Coordination: Ability to move hands and feet in a coordinated manner, as in sports, dancing, and moving large objects

152 Clerical Perception: Ability to understand the important details in both spoken and written communications, to proofread words and numbers accurately; must be able to perform mathematical operations without error
Special aptitude – reading

These five characteristics reflect the level of reading required to perform the duties of a particular occupation.

161 Reading Level 1 (Lowest) – Little or no reading required. Read simple words that rarely change, such as inventory lists and instructions on work orders; includes comparing names and numbers.

162 Reading Level 2 – Read routine materials with some special terms. Read simply written material and learn terms that relate to the specific job. Once the special terms are understood, the reading becomes routine. This level includes reading recipes, invoices, charts, labels, and rules.

163 Reading Level 3 – Read specialized terms and grasp concepts. Read groups of special terms related to the job and understand the concepts presented or actions to be performed. Includes reading methods of mechanical drawing, simple medical terms, gauges on equipment, and simple laws and regulations.

164 Reading Level 4 – Occasionally read technical or instructional material. Read service manuals, legal documents, blueprints, instructions on care of equipment and methods of preparing solutions. This level requires a broad knowledge of a certain field. A lot of reading is involved, but it is not all difficult.

165 Reading Level 5 (Highest) – Read a lot of scientific or technical material. Read a great deal of material relating to many specialized fields, such as medical findings, statistics, financial and stock reports, music theory, properties of chemicals, and legal material. This level involves reading to keep up with changes in the occupation and relating those changes to action on the job.

Special aptitude – writing

These five characteristics reflect the level of writing required to perform the duties of a particular occupation.

171 Writing Level 1 (Lowest) – Little or no writing required. Print simple words and series of numbers, names, and addresses. Includes checking off work completed, labeling bottles, and making notes in customer and patient files.

172 Writing Level 2 – Write some sentences using proper punctuation. Write compound and simple sentences using adverbs, adjectives, and punctuation. Includes ordering materials, taking messages, and making notes in customer and patient files.

173 Writing Level 3 – Write short reports and keep records using standardized forms. Requires knowledge of correct grammar and spelling. This level includes writing tax reports, bills to customers, cost estimates, results of tests, and daily reports of activities.

174 Writing Level 4 – Write reports or letters using a specific format. Prepare business letters, summaries, and reports, using correct grammar, style, and format. Includes writing for advertising campaigns, reports on banking transactions, summaries on the condition of patients, findings of investigations, and damage and repair reports.

175 Writing Level 5 (Highest) – Write speeches and technical material. This level involves the ability to be able to write precisely, creatively, and clearly so that others can understand the material. Includes writing service and instruction manuals, legal contracts, sermons, technical papers for magazines, reports on survey findings, and proposals for building plans.

Special aptitude – public speaking

These five characteristics reflect the level of speaking required to perform the duties of a particular occupation.

181 Speaking Level 1 (Lowest) – Speak simple sentences. Speak to other people in simple sentences using past and present tenses. Includes following simple oral instructions, and asking co-workers and supervisors simple questions.

182 Speaking Level 2 – Speak clearly using correct English. Speak so others can understand your words, using correct pronunciation. Includes conversing with customers at a restaurant, answering customer questions, and discussing work to be done with a supervisor.

183 Speaking Level 3 – Speak confidently to a small group. Speak before a small group of people using a pleasant voice and correct English. Includes greeting passengers and answering questions, calling on new customers, talking to patients, giving orders to other workers, and presenting reports to supervisors.

184 Speaking Level 4 – Discuss a variety of subjects in a group. This level reflects the ability to talk to people on many subjects in a group setting, such as...
consulting with a number of people working on different parts of a project. It also includes participating in debates and discussing at business meetings.

185 Speaking Level 5 (Highest) – Talk effectively to a group using persuasive techniques and a well-trained voice. This level includes discussing technical material with supervisor and workers, like discussing diseases and cures. Other examples are speaking to community organizations, speaking before television audiences, and teaching students to speak effectively.

Special aptitude – scientific thinking

These five characteristics reflect the level of thinking required to perform the duties of a particular occupation.

191 Scientific Thinking Level 1 (Lowest) – Solve simple work problems in a rigid, structured environment following simple oral or written instructions.

192 Scientific Thinking Level 2 – Solve work problems that have a few variables in a structured work environment by following detailed instructions.

193 Scientific Thinking Level 3 – Solve work problems that have several variables in a structured work environment by following oral, written, or schematic instructions.

194 Scientific Thinking Level 4 – Solve work problems that have several abstract and concrete variables in a work environment with limited structure by using mathematical or schematic instructions.

195 Scientific Thinking Level 5 (Highest) – Solve work problems that have multiple variables in a work environment with many abstract concepts and very limited structure by using formulas, equations, or graphs.

School Subjects or Programs of Study

Academic subjects

201 Language Arts: English grammar, literature, composition, speech, foreign languages and literature

202 Mathematics: Basic and advanced mathematics, algebra, geometry, trigonometry, calculus

203 Chemistry: Chemical properties and reactions of naturally occurring and man-made compounds

204 Physics: Laws of motion, sound, optics, electromagnetism, atomic structure, semiconductor properties, properties of matter at very low and very high temperatures

205 Biology: Study of living organisms, both plant and animal

206 Social Studies: Sociology, political science, geography, psychology

207 Economics: Study of the principles governing the production, distribution, and consumption of goods and services

208 Music/Art/Drama: Instrumental and vocal music, studio arts, dance, drama, theater

209 Health and Physical Education: Health care, physical fitness, recreation

Vocational subjects

211 Industry/Technology: Drafting, graphic arts, metalworking, mechanical skills, woodworking, construction, electricity, and electronics

212 Family/Consumer Science: Foods and nutrition, textile arts, clothing and tailoring, home management, child care, family living

213 Agriculture: Agricultural production, services, mechanics, and management

214 Marketing: Analyzing the potential demand for products, advertising, sales promotion

215 Business/Accounting: Business management, financial planning, commercial law, accounting

216 Office/Clerical: Keyboarding and word processing, spreadsheets, secretarial skills, data entry, record keeping, filing

217 Health/Medical: Therapeutic techniques, medical technology, clinical social work, medical illustrating

218 Computers/Applications: Data processing, systems and application programming, computer graphics, management information systems, computer operating

Programs of study cluster groups

These are the names of the 14 sets of related programs into which the Programs of Study Clusters are grouped in the WCIS Education Handbook.

221 Agriculture/Natural Resources
Physical effort involved in work
301 Little or no lifting (maximum of 10 lbs.)
302 Lift 11 to 20 lbs.; carry a maximum of 10 lbs.
303 Lift 21 to 50 lbs.; carry a maximum of 25 lbs.
304 Lift 51 to 100 lbs.; carry a maximum of 50 lbs.
305 Lift 100 lbs. or more; carry 50 lbs. or more

Use of body and senses in work
306 Climb, balance, stoop, kneel, etc.
307 Reach, handle, and touch
308 Talk and hear
309 See clearly
310 Stand most of the time
311 Sit most of the time
312 Stand and sit equally
313 Considerable walking

Travel required in work
You may prefer working at the same place everyday, or you may like to move from place to place.
351 No travel
352 Local travel, work at different job sites
353 Frequent overnight travel
Less than four years following high school
Four or more years of college

High School Training/Work Experiences

Cooperative Education: These programs allow students to hold part-time jobs and receive credits for their training and work experience. This option is available at many high schools in Wisconsin.

Tech Prep: Programs allow students to take Wisconsin Technical College System courses (WTCS) and enter associate degree programs with advanced standing when they graduate. This option is available at many high schools in Wisconsin.

Youth Apprenticeship: In these programs students train under the supervision of mentors, and enter WTCS programs with advanced standing when they graduate and complete their apprenticeships. This option is available at many high schools in Wisconsin.

Other training or experience required

Apprenticeship: 1 to 5 years of a formal, paid program to learn a craft or trade
Short-term OJT (On-the-job training) up to one month: receive pay for working while learning a job
Moderate-term OJT (On-the-job training) 1 to 12 months
Work Experience
Private lessons: training paid for by the worker
Exceptional Skills: worker demonstrates

Other requirements

License
Certification
Examination
Union membership
Entrepreneurial opportunities

Employment in Urban or Rural Areas

You may want to explore occupations that can be found primarily in the country or the city.

Urban: Metropolitan areas and suburbs
Rural: Small towns and country areas

Occupational Group/Classification

Standard Occupational Classification (SOC)

Occupations described in the WCIS Occupations Handbook are arranged by SOC number.

Executive, administrative, and managerial occupations (Division 1000)
Engineers, surveyors, and architects (Division 1600)
Natural scientists and mathematicians (Division 1700)
Social scientists, Social workers, religious workers, and Lawyers (Division 1900)
Teachers, librarians, and counselors (Division 2200)
Health diagnosing and treating practitioners (Division 2600)
Registered nurses, pharmacists, dietitians, therapists, and physician assistants (Division 2900)
Writers, artists, entertainers, and athletes (Division 3200)
Health technologists and technicians (Division 3600)
Technologists and technicians, except health (Division 3700)
Marketing and sales occupations (Division 4000)
Administrative support occupations, including Clerical (Division 4500)
Service occupations (Division 5000)
Agricultural, forestry, and fishing occupations (Division 5500)
Mechanics and repairers (Division 6000)
Construction and extractive occupations (Division 6300)
Precision production occupations (Division 6700)
Production working occupations (Division 7100)
Transportation and material moving occupations (Division 8100)
Handlers, equipment cleaners, helpers, and laborers (Division 8500)
Military occupations (Division 9100)

Dictionary of Occupational Titles (DOT)

The U.S. Department of Labor groups occupations into nine occupational families using the Dictionary of Occupational Titles classification scheme.
631 **Professional, Technical, and Managerial Occupations:** Architecture, engineering, and surveying; mathematics and physical sciences; life sciences; social sciences; medicine and health; education; museum, library, and archival sciences; law and jurisprudence; religion and theology; writing; art; entertainment and recreation; administrative specializations; managers and officials; other professional, technical, and managerial occupations

632 **Clerical and Sales Occupations:** Stenography, typing, filing, and related occupations; computing and account-recording; production and stock clerks; information and message distribution; sales occupations

633 **Service Occupations:** Domestic service, food and beverage preparation, lodging, barbering and cosmetology, amusement and recreation, apparel and furnishings, protective services, commercial cleaning services

634 **Agriculture, Fishery, Forestry, and Related Occupations:** Plant and animal farming, fishery, forestry, hunting and trapping

635 **Processing Occupations:** Processing of metal, ore refining and foundry occupations, processing of food and tobacco, processing products of assorted materials

636 **Machine Trade Occupations:** Metal machine occupations; other metalworking occupations; mechanics and machinery repairers; paper working occupations; printing; wood machining; occupations in machining; stone, clay, and glass; textile occupations; other machine trade occupations

637 **Bench Work Occupations:** Machining, assembly, and repair of metal products; development and repair of scientific and optical products; assembly and repair of electrical equipment; assembly and repair of products from assorted materials; painting and decorating; molding and repairing plastics, synthetics, and rubber; kilning and repair of sand, stone, clay, and glass products; weaving and repair of textiles and cutting and stitching leather products; other benchwork occupations

638 **Structural Work Occupations:** Metal fabricating; welding and cutting; electrical assembling, installing, and repairing; painting, plastering, and paving; other construction occupations (carpentry, plumbing, etc.); other structural work occupations (maintenance)

639 **Miscellaneous Occupations:** Motor freight occupations (truck drivers); other transportation occupations (railroad, water, air); packaging and materials handling occupations; occupations in mining of materials; production and distribution of utilities; amusement, recreation, cinema, radio, and TV occupations; occupations in graphic art work

**Office of Education Work Areas (USOE)**

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<thead>
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<th>Office of Education Work Areas (USOE)</th>
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<td>The U.S. Office of Education identifies 15 different areas of work.</td>
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641 **Agri-Business and Natural Resources:** Support and regulations, research, forestry, land and water management, fisheries and wildlife, mining and quarrying, petroleum related products, productive agriculture processing and marketing services

642 **Business and Office:** Accounting, computer, secretarial science, management, personnel, finance, insurance, real estate, office (clerical)

643 **Communications and Media:** Journalism; motion pictures; telephony; digital recording industry; radio, television, and cable broadcasting; satellite, cellular, and broadband transmission

644 **Construction:** Structural work occupations, equipment operators, engineering and support occupations

645 **Consumer and Homemaking Education:** Food specialties, housing and household equipment specialties, textiles and clothing, family economics and home management, family relations and child development, extension services related to family

646 **Environment:** Pollution prevention and control, disease prevention, environmental planning, resources control, waste management

647 **Fine Arts and Humanities:** Visual arts, writing, performing arts, architecture, religion and theology, language and linguistics, history and museums

648 **Health:** Mental health and mental health services, medical and biological science services, dentistry and dental science services, general hospital and medical office related occupations, medical emer
gency services, administration of health services, personal and community health services, pharmaceutical science and services, professional medical supportive personnel, medical professions

649 Hospitality and Recreation: Commercial and noncommercial travel bureaus; travel agencies; transportation; public, private, and industrial recreation; recreation concerned with natural resources

650 Manufacturing: Management, science, engineering, machine trade occupations, processing occupations

651 Marine Science: Research, chemical and mineral extractions, off-shore drilling, fishing, aquaculture, marine engineering and technology, surface and on-shore support

652 Marketing and Distribution: Marketing management, marketing research and analysis, purchasing, selling, physical distribution, related business services

653 Personal Services: Domestic service; lodging and related service occupations; barbering, cosmetology, and related services; stewards, attendants, hosts, and miscellaneous personal services; domestic animal care; food and beverage preparation and services

654 Public Services: Administration and regulatory services, urban development, education, protective services, post office, public utilities, public health, labor affairs, public transportation, social services, rehabilitation, correction, parks and recreation

655 Transportation: Highway, rail, air, pipeline, and water transport

Department of Labor Work Areas (GOE)

Occupations are grouped in this section into 12 work areas as identified by the U.S. Department of Labor in the Guide for Occupational Exploration.

661 Artistic: Literary and visual arts, drama, music, dance, and crafts

662 Scientific: Physical and life sciences, medicine, and laboratory technology

663 Plants and Animals: Animal care and training, plant care, and related areas

664 Protective: Safety and law enforcement and security services

665 Mechanical: Engineering, quality control, transportation, and related work

666 Industrial: Production work, production technology, elemental work, etc.

667 Business Detail: Administration, mathematical and finance related work, clerical work, etc.

668 Selling: General sales and related work

669 Accommodating: Hospitality services, personal care services, and passenger and customer services

670 Humanitarian: Social services, nursing, therapy, specialized teaching services, etc.

671 Leading – Influencing: Education, law, management and administration, communications, etc.

672 Physical Performing: Sports and related areas

Occupational field (WCIS Classification)

If you are interested in a particular school subject, you may also be interested in certain occupations. The following characteristics are not requirements for occupations. However, interest in a school subject may lead to interest in certain occupations.

681 Natural Things: Agriculture, animals, environment, and natural resources

682 Office and Sales: Clerical, computer, banking, insurance, administration, management, and marketing

683 Construction and Transportation: Building and repair of all kinds of structures, as well as jobs in air, rail, highway, and water transportation

684 Art, Design, Communication and Media: Creative work, fine arts, communications and media (radio, television, newspaper, magazines, books)

685 Health: Dentistry, medicine, nursing, therapy, and related jobs (technologists, technicians, assistants)

686 Industrial Production: Manufacturing and production of material things; jobs include foundry work, machine work, printing, assembly, and other related work

687 Service, Social Service, and Social Science: Service to people, education, helping and learning about society; work includes personal service, food service, cleaning, protection, counseling, religion, social work, teaching, sociology, psychology, and history

688 Scientific, Technical, Mechanical, and Repair: Mathematics, biological, chemical, and physical sciences; engineering and technology; mechanics and repair
Industries with Which Occupation Is Associated

691 Agriculture - Production and Services
692 Forestry, Fishing, Hunting, and Trapping
693 Mining
694 Construction
695 Manufacturing
696 Transportation
697 Communications
698 Electric, Gas, and Sanitary Services
699 Wholesale Trade
700 Retail Trade
701 Finance, Insurance, and Real Estate
702 Lodging and Personal Services
703 Business Services
704 Automotive and Other Repairs and Services
705 Motion Picture, Amusement, and Recreation Services
706 Health and Legal Services
707 Education, Social, and Membership Services
708 Professional Services
709 Public Administration

Military Occupations

Military characteristics are keyed only to those occupational titles for which at least one military counterpart occupation exists.

Branches of the Armed Forces
741 Related Army Occupation(s)
742 Related Navy Occupation(s)
743 Related Air Force Occupation(s)
744 Related Marine Corps Occupation(s)
745 Related Coast Guard Occupation(s)

Military rank of occupation
751 Rank – Officer
752 Rank – Enlisted

Results from Interest Inventories

WCIS Wisconsin State Assessment System (WSAS)

Description: WSAS is the interest component of the Wisconsin Student Assessment System. The test is administered in the eighth and tenth grades in all schools in Wisconsin. The test is developed by Psychological Corporation, Inc., and is part of their regular test: Differential Aptitude Test; Career Interest Inventory (DAT-CII).

781 Agriculture: This field involves working with plants and animals. Examples of jobs include farmer, forest ranger, gardener, horse trainer.

782 Bench Work: Workers in this field often use handtools to make or repair small products. Examples of jobs include jewelry repairer, locksmith, electronics technician for VCRs/TVs.

783 Building Trades: Jobs in this field involve highly skilled work. They include carpenter, bricklayer, plumber, painter, welder, roofer.

784 Clerical Services: Workers in this field do a variety of things, such as prepare and keep records and operate office machines. Examples of jobs include secretary, clerk-word processor, cashier, bookkeeper.

785 Customer Service: Workers in this field perform a variety of tasks, such as guard and clean buildings, prepare and serve food, cut and style hair. Examples of jobs include cook, police officer, flight attendant.

786 Educational Services: Workers in this field enjoy helping people learn. Job examples include teacher, librarian, museum worker, college professor.

787 Fine Arts: Workers in this field use skills in creative arts and entertainment. Examples of jobs include writer, artist, editor, reporter, musician, singer, photographer, media specialist.

788 Health Services: Workers in this field provide a variety of services for the sick, injured, and disabled. Examples of jobs include nurse, doctor, physical therapist, veterinarian.

789 Legal Services: Workers in this field advise people about legal matters. Examples of jobs include lawyer, judge, paralegal, private investigator.

790 Machine Operations: Workers in this field use and operate machines to work with such materials as metal, paper, or wood. Examples of jobs include press operator, band saw operator, furnace operator, injection mold operator, CNC lathe operator.

791 Management: Workers in this field establish goals, direct operations, and control activities within an organization. Examples of jobs include manager, accountant, banker.

792 Mathematics and Science: Workers in this field like to do research that often involves observing
things and doing experiments. Examples of jobs include engineer, computer scientist, chemist.

793 **Sales:** Sales work involves buying and selling products or services. Examples of jobs include sales person, fund raiser, real estate sales agent.

794 **Social Science:** Workers in this field are concerned about the needs of people. Examples of jobs include counselor, social worker, psychologist, sociologist, historian.

795 **Transportation:** The majority of the workers in this field operate such vehicles as trucks, tractors, buses. Examples of jobs include ambulance driver, truck driver, service station attendant.

**Ohio Vocational Interest Survey (OVIS) Scales**

801 **Agriculture and Life Sciences:** Conducting research and applying knowledge of the life sciences to raising crops and training animals

802 **Basic Services:** Protecting or caring for people or animals

803 **Clerical:** Word processing, filing, recording, data entry, and doing other detailed work

804 **Communications:** Writing, editing, reporting, conducting research, and organizing and retrieving information

805 **Crafts and Precise Operations:** Doing highly skilled hand and machine work

806 **Customer Services:** Selling products and services, making reservations, and giving information

807 **Education and Social Work:** Teaching, counseling, and providing other social services

808 **Engineering and Physical Sciences:** Conducting research and applying knowledge of the physical sciences to construction and manufacturing

809 **Health Services:** Providing nursing and related health services to the ill, injured, or handicapped

810 **Legal Services:** Applying knowledge of the law to preparing contracts and settling disputes

811 **Machine Operations:** Driving vehicles, operating heavy equipment, and using machines to make products

812 **Management:** Directing, planning, and managing the major activities of private and government organizations

813 **Manual Work:** Using hands and hand tools to do physically active and routine work

814 **Marketing:** Advertising, demonstrating, and buying and selling complex products and services

815 **Medical Services:** Preventing or diagnosing and treating diseases and injuries of people and animals

816 **Music:** Singing, playing an instrument, composing, arranging, teaching, and directing musical groups

817 **Numerical:** Using mathematics in accounting, banking, data processing, and research

818 **Performing Arts:** Entertainment an audience through dancing, acting, or announcing, and teaching and directing these activities

819 **Quality Control:** Checking the quality of products, materials, and services

820 **Regulations Enforcement:** Enforcing laws and regulations to protect health, safety, and property

821 **Skilled Personal Services:** Sewing, tailoring, cooking, and cutting and styling hair

822 **Sports and Recreation:** Competing and officiating in professional sports and helping to entertain people in their leisure time

823 **Visual Arts:** Creating art through painting, drawing, photography, and other forms

**Interest, Determination, Exploration, and Assessment System (IDEAS)**

**Description:** IDEAS is a self-contained, self-scorable interest inventory that serves as an introduction to career planning and exploration. Written at a 6th grade reading level, the 10-page booklet can be completed and self-scored in 30 minutes. It is a short version of Career Assessment Inventory.

**Author:** Charles B. Johansson, Ph.D.

**Publisher:** NCS Assessments

5605 Green Circle Drive
Minnetonka, MN 55343
Telephone 1-800-627-7271

**Completion Time:** Approximately 35 minutes; for students in grades 6–12.

831 **Mechanical/Fixing:** Work with small hand tools, make things out of wood, fix a broken radio or a clogged sink — aircraft mechanic, camera repair technician, computer service technician, machinist, office machine repairperson, pipefitter/plumber.
832 Protective Services: Drill in military company, be in the military/armed services, inspect people for security clearance — conservation officer, firefighter, military personnel, park ranger, police officer, private investigator, security guard.

833 Nature/Outdoors: Plant your own garden, grow flowers, work in nature/outdoors, plant trees, study agriculture — athletic trainer, biologist, conservation officer, forest ranger, landscape manager, park ranger, veterinarian, veterinary technician.


835 Science: Study effects of gravity, work on a research project, read books on science, enter a project in a science fair or contest — biologist, chemist, computer scientist, engineer, physicist.

836 Medical: Improve the health of others, learn about the effectiveness of certain medications, take the pulse of a hospital patient, fix a person’s broken leg — dentist, occupational therapist, pharmacist, physical therapist, physician, veterinarian.

837 Creative Arts: Visit art galleries, act in a play, do free-hand drawings and sketches, make a rug from yarn, make pottery, arrange flowers for a display — advertising copywriter, advertising executive, elementary school teacher, interior designer, occupational therapist, occupational therapy assistant.

838 Writing: Write a novel, write a story for a magazine, write poetry — advertising copywriter, advertising executive, author/writer, lawyer, newspaper reporter, religious leader.

839 Community Service: Work with a group on a project, organize a group or club, do volunteer work with a community group, raise money for charity, help someone solve personal problems — chemical dependency counselor, child care assistant, guidance counselor, occupational therapist, religious leader.

840 Educating: Teach children to read, teach swimming, coach a high school sports team — child care assistant, guidance counselor, math-science teacher, religious leader, teacher’s aide.

841 Child Care: Direct a children’s play, tell stories to children, do babysitting, help physically handicapped children exercise, help a child with a spell-

842 Public Speaking: Defend the rights of others, be on a debate team, lead group discussions, interview people in an opinion survey, speak up for your viewpoints — elected public official, lawyer, newspaper reporter, religious leader.

843 Business: Interview people for a job, be the leader of a group project, be responsible for hiring and firing people, manage a department store, work on advertisement of something new — bank manager, executive housekeeper, hotel/motel manager, personnel manager.

844 Sales: Sell office equipment, sell merchandise by traveling from place to place, sell something to a customer, work on sales campaign of a new product, sell things over the telephone — buyer/merchandiser, insurance agent, manufacturing representative, real estate agent, sales clerk.

845 Office Practices: Do office work such as typing or filing, operate a cash register, work in an office, type reports or assignments — accountant, bank teller, bookkeeper, dental assistant, medical assistant, sales clerk, secretary.

846 Food Service: Work in a kitchen, plan meals, try new cooking recipes, prepare dinner for guests, enter a baking contest, prepare food for special diets — cafeteria worker, chef, dietitian, food service manager, licensed practical nurse, restaurant manager, waiter/waitress.

California Occupational Preference System (COPS) Interest Inventory

**Description:**
COPS uses a Self-Scoring Booklet and a Self-Interpretation Profile and Guide for machine scoring using a reusable booklet and an answer sheet for computer processing. COPS relates job activity preferences to clusters of related occupations for vocational, noncollege, and professionally oriented persons. It coordinates with other COPS instruments measuring abilities (CAPS) and values (COPES).

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**Publisher:**
EDITS
P.O. Box 7234
San Diego, CA 92167
Telephone 619-488-1666

**Completion Time:**
1 hour or less; for grades 7-12.
Science, Professional (A): Occupations involve responsibility for the planning and conducting of research and the accumulation and application of systemized knowledge in the related branches of mathematical, medical, life, and physical sciences.

Science, Skilled (H): Occupations involve observation and classification of facts in assisting in laboratory research and its application in the fields of medicine and life and physical sciences.

Technology, Professional (B): Occupations involve responsibility for engineering and structural design in the manufacture, construction, or transportation of products or utilities.

Technology, Skilled (I): Occupations involve working with one’s hands in a skilled trade concerned with construction, manufacture, installation, or repair of products in related fields of construction, electronics, and mechanics.

Consumer Economics (C): Occupations concerned with the preparation and packaging of foods, and the production and care of clothing and textile products.

Business, Professional (D): Occupations involve positions of high responsibility in the organization, administration, and efficient functioning of businesses and governmental bureaus in regard to finance and accounting, management, and business promotion.

Business, Skilled (K): Occupations concerned with sales and promotion and the correlated financial and organization activities of businesses.

Clerical (E): Occupations involve recording, posting, and filing of business records requiring great attention to detail, accuracy, neatness, orderliness, and speed in office work and in contact with customers concerning compilation of records.

Communication (L): Occupations involve skill in the use of language in the creation or interpretation of literature or in the written and oral communication of knowledge and ideas.

Arts, Professional (F): Occupations involve individualized expression of creative or musical talent and ability in fields of design, fine arts, and performing arts.

Arts, Skilled (M): Occupations involve application of artistic skill in the fields of graphic arts and design.

Service, Professional (G): Occupations include positions of high responsibility which involve interpersonal relations in caring for the personal needs and welfare of others in fields of social service, health, and education.

Service, Skilled (N): Occupations involve providing services to persons and catering to the tastes, desires, and welfare of others in fields of personal service, social and health related service, and protection and transportation.

Holland Themes

This section is divided into three parts: descriptions of career materials related to John Holland’s occupational themes, definitions of the six themes (RIASEC), and the corresponding WCIS characteristics.

Numerous standardized tests and career planning materials incorporate the Holland themes. Descriptions of the following six are included: Career Assessment Inventory, Self-Description Inventory, The Self-Directed Search, Strong Interest Inventory, Vocational Preference Inventory, and Richard Bolles’ publications.

Career Assessment Inventory (CAI)

Description: The CAI helps students and adults with their career decisions by measuring interest in careers requiring a minimum of postsecondary education. Scores are reported according to Holland themes, basic interest scales, and occupational scales. It is written at the 6th grade reading level and requires machine scoring.

Author: Charles B. Johansson, Ph.D.

Publisher: NCS Assessments
5605 Green Circle Drive
Minnetonka, MN 55343
Telephone 1-800-627-7271

Completion Time: 20–40 minutes
Self-Directed Search (SDS)
Description: The SDS assists clients in evaluating their abilities and interests and then matching them with occupations. It is appropriate for high school through adult and is answered, scored, profiled, and interpreted by the client.
Author: John L. Holland, Ph.D.
Publisher: Psychological Assessment Resources
P.O. Box 998
Odessa, FL 33556
Telephone 1-800-331-8378
Completion Time: 30–40 minutes. 1 hour or less for completion, and an additional 1-2 hours to study relevant information in the DOT and OOH.

Strong Interest Inventory
Description: The Strong Interest Inventory gives a profile organized according to Holland’s themes, basic interest scores, and occupational scales. It was revised in 1981. It cannot be scored by hand.
Authors: Edward K. Strong
Publisher: Consulting Psychologists Press, Inc.
3803 East Bayshore Road
Palo Alto, CA 94303
Telephone 415-969-8901
Completion Time: 30-40 minutes for 8th grade-adult
Vocational Preference Inventory (VPI)
Description: The VPI is a personality test using occupational item content and is based on the theory that occupations can be described in terms of personality characteristics. It is designed for high school and adult ages, and can be hand scored in less than one minute.
Author: John L. Holland, Ph.D.
Publisher: Psychological Assessment Resources
P.O. Box 998
Odessa Fl 33556
Telephone 1-800-331-8378
Completion Time: 15-30 minutes

Richard Bolles’ Publications Related to Holland Themes
What Color Is Your Parachute?
The Quick Job Hunting Map
Descriptions: What Color Is Your Parachute? gives exercises and procedures to help individuals determine what type of job they want, how to find the job, and how to convince an employer they are the best person for the job.
The Quick New Job Hunting Map is a 64-page booklet from What Color Is Your Parachute? It helps users with skills identification and matches them to the job market. Both publications use Holland’s themes.
Author: Richard N. Bolles
Publisher: Ten Speed Press
P.O. Box 7123
Berkeley, CA 94707
510-559-1600

Holland’s Definitions of Work Areas/Types
Artistic (A): Artistic, musical, literary occupations; people who have artistic, innovating, or intuitive abilities and like to work in an unstructured situation, using their creativity or imagination
Conventional (C): Clerical and office occupations; people who like to work with data, have clerical or numerical ability, carrying things out in detail or following through on instructions
Enterprising (E): Managerial/sales occupations; people-influencing, persuading, performing, leading, or managing for organizational goals or economic gains
Investigative (I): Scientific and some technical occupations; people who like to observe, learn, investigate, analyze, evaluate, or solve problems
Realistic (R): Skilled trades, technical, and some service occupations; people who have athletic or mechanical ability, prefer to work with objects, machines, tools, plants, animals outdoors
Social (S): Educational and social welfare occupations; people who like to work with people to inform, enlighten, help, train, develop, or cure them, or are skilled with words

WCIS Characteristics for Holland Themes
Primary Interest and Competency Category
871 Artistic (primary)
872 Conventional (primary)
873 Enterprising (primary)
874 Investigative (primary)
875 Realistic (primary)
876 Social (primary)
Secondary Interest and Competency Category
881 Artistic (secondary)
882 Conventional (secondary)
883 Enterprising (secondary)
884 Investigative (secondary)
885 Realistic (secondary)
886 Social (secondary)

Tertiary Interest and Competency Category
891 Artistic (tertiary)
892 Conventional (tertiary)
893 Enterprising (tertiary)
894 Investigative (tertiary)
895 Realistic (tertiary)
896 Social (tertiary)

Using Holland Themes with WCIS
For example, suppose the results of a client’s Self-Directed Search yield the three-letter code value “IRE.” Enter characteristics 579 (Investigative, primary), 586 (Realistic, secondary), and 590 (Enterprising, tertiary) in the Career Visions occupational search program. (The terms primary, secondary, and tertiary refer to first, second, and third position of the three-letter code resulting from a search.) Of course, just the primary code may be used. This would work well using Bolles’ party game from What Color Is Your Parachute? and The Quick Job Hunting Map.