Nontraditional Careers

Unit: Career Exploration

Problem Area: Skills, Values, and Interest Assessments

Lesson: Nontraditional Careers

- **Student Learning Objectives.** Instruction in this lesson should result in students achieving the following objectives:
 - **1** Define nontraditional career opportunities.
 - **2** Explore nontraditional career opportunities.
- **Resources.** The following resources may be useful in teaching this lesson:

American School Counselor Association. Accessed June 7, 2011. http://www.schoolcounselor.org.

ASU CareerWISE. Accessed June 7, 2011. http://careerwise.asu.edu/.

Boraas, Stephanie, and William M. Rodgers III. "How Does Gender Play a Role in the Earnings Gap? An Update," *Monthly Labor Review*, Bureau of Labor Statistics, March 2003, 9–15. Accessed June 7, 2011. http://www.bls.gov/opub/mlr/2003/03/art2full.pdf.

"Career and College Planning Resources," *Vocational Information Center*. Accessed June 7, 2011. http://www.khake.com/page51.html>.

"Career Click," *Illinois Department of Employment Security*. Accessed June 7, 2011. http://www.workforceinfo.state.il.us/>.

Career Discovery Encyclopedia, 7th ed. Infobase Publishing, 2009.

"Career Guide to Industries (CGI), 2010–11 Edition," *U.S. Bureau of Labor Statistics*. Accessed June 7, 2011. http://www.bls.gov/oco/cg/.



- CareerOneStop. Accessed June 7, 2011. http://www.acinet.org/acinet/>.
- "Curriculum Revitalization," *Illinois Career & Technical Education*. Accessed June 7, 2011. http://www.ilcte.org.
- "Help Wanted: Projections of Jobs and Education Requirements Through 2018," Georgetown University Center on Education and the Workforce. Accessed June 7, 2011. http://cew.georgetown.edu/jobs2018/.
- "Highlights for High School," MIT OpenCourseWare, Massachusetts Institute of Technology. Accessed June 7, 2011. http://ocw.mit.edu/high-school/.
- Kalchik, Stephanie, and Kathleen Marie Oertle. "The Relationship of Individual Career Plans to Programs of Study and Career Pathways," *Transition Highlights*, Issue 3, Jan. 2011. Office of Community College Research and Leadership (OCCRL). Accessed Mary 13, 2011. http://occrl.illinois.edu/files/Highlights/Highlight 01 2011.pdf>.
- "National Sample Definitions," *Career Clusters*. Accessed June 7, 2011. http://www.careerclusters.org/definitions.php.
- "Nontraditional Careers," *iSeek Careers*. Accessed June 7, 2011. http://www.iseek.org/careers/nontraditional.html.
- "Nontraditional Careers Program," *Utah State Office of Education*. Accessed June 7, 2011. http://www.schools.utah.gov/cte/nontrad_pathways.html.
- "Nontraditional Electronic Newsletter," *Center for Workforce Development, Southern Illinois University at Carbondale*. Accessed June 7, 2011. http://cwd.siu.edu/ge-cteworks.php.
- O*NET® OnLine. Accessed June 7, 2011. http://online.onetcenter.org/.
- "Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century," *Harvard Graduate School of Education*, Feb. 2011. Accessed June 7, 2011. http://www.gse.harvard.edu/news_events/features/2011/Pathways_to_Prosperity_Feb2011.pdf.
- "Programs of Study," *Illinois Community College Board*. Accessed June 7, 2011. http://ilprogramsofstudy.org/CareerClusters.action>.
- "Programs of Study in Nontraditional Career Pathways: Constructing the Path," *Illinois Center for Specialized Professional Support (ICSPS), Illinois State University.* Accessed June 7, 2011. <icsps.illinoisstate.edu/services/documents/NTO-SWIC-6-2009.ppsx>.
- "Recommended Reading," *Career Vision*. Accessed June 7, 2011. http://www.careervision.org/Resources/Recommended_Reading.htm.
- Reha, Lynn, and Lisa Matejka. "New Resources for Women in STEM Careers," *Illinois Center for Specialized Professional Support (ICSPS), Illinois State University*. Accessed June 7, 2011. http://www.icsps.ilstu.edu/services/pd/docs/FY11-Connections-STEM-show.pdf.

- "Related Websites," *Career Clusters*. Accessed June 7, 2011. http://www.careerclusters.org/related.php.
- Report to the President—Prepare and Inspire: K–12 Education in Science, Technology, Engineering, and Math (STEM) for America's Future, President's Council of Advisors on Science and Technology (PCAST), Sept. 2010. Accessed June 5, 2011. http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-stem-ed-final.pdf.
- "Sixteen Career Clusters and Their Pathways," *Career Clusters*. Accessed June 7, 2011. http://www.careerclusters.org/list16clusters.php.
- "Sixteen DVDs and Three Posters Highlight Women in Nontraditional Careers," Women in Nontraditional Careers. Accessed June 7, 2011. http://www.nontraditionalcareers.com/.
- "State Level Analysis," *Georgetown University Center on Education and the Workforce*. Accessed May 31, 2011. http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/illinois.pdf.
- "STEPS to Successful Career Planning," *Arizona State University*. Accessed May 31, 2011. http://career.asu.edu/S/careerplan/selfdiscovery/AssessmentTools.htm.
- "Women in the Labor Force: A Databook (2008 Edition)," *U.S. Bureau of Labor Statistics*. Accessed June 7, 2011. http://www.bls.gov/cps/wlf-databook2008.htm.

Equipment, Tools, Supplies, and Facilities

- ✓ Overhead or PowerPoint projector
- ✓ Visual(s) from accompanying master(s)
- ✓ Copies of sample test, lab sheet(s), and/or other items designed for duplication
- ✓ Materials listed on duplicated items
- ✓ Computers with printers and Internet access
- ✓ Classroom resource and reference materials

Key Terms. The following terms are presented in this lesson (shown in bold italics):

- career clusters
- comprehensive career assessment
- cross-gender career
- gender-neutral career
- nontraditional occupation (NTO)
- STEM

Interest Approach. Use an interest approach that will prepare the students for the lesson. Counselors and teachers often develop approaches for their unique counseling and class situations. A possible approach is included here.

Introduce the following setup to your students.

Each specific occupation has a set of knowledge and skills necessary for success in that field. The required skills may be mathematics, spatial relationship, creativity, or compassion. Some obvious personality traits also make for a good fit with certain careers. You may want to "white board" the discussion and ask the students what skills, knowledge, and personality traits they associate with certain careers. Point out that no occupations require one to be a certain gender. Allow this point to sink in, and discuss false stereotypes. Reinforce that all the career fields are available to everyone. The best part about nontraditional careers is that for the person for whom a great "fit" exists, there is a much higher degree of job satisfaction. And job satisfaction is priceless.

CONTENT SUMMARY AND TEACHING OR COUNSELING STRATEGIES

Objective 1: Define nontraditional career opportunities.

Anticipated Problem: What are nontraditional career opportunities?

- I. Nontraditional career opportunities
 - A. A *nontraditional occupation (NTO)* is an occupation in which one gender makes up less than 25 percent of the employment within that field. A person whose job position is in a nontraditional field is said to possess a *cross-gender career*. Examples of individuals in cross-gender careers are a male kindergarten teacher and a female firefighter.
 - 1. Skill requirements do not have gender requirements.
 - 2. Nontraditional careers are included in the following areas of study:
 - a. Agricultural education
 - b. Business education
 - c. Family and consumer sciences education
 - d. Health science education
 - e. Information technology education
 - f. Marketing education
 - g. Skilled and technical sciences education
 - h. Technology and engineering education

- 3. Examples of nontraditional career opportunities for females
 - a. Broad categories of jobs include many that are labor intensive, scientific/ technical, and supervisory. Examples are aircraft technician, forestry scientist, construction trades worker, fire scientist, dentist, and machinist. According to the National Alliance for Partnerships in Equity (NAPE), when females exhibit aptitudes for fixing, analyzing, exploring, building, enduring, and leading, they may be happier, more fulfilled, and more successful in nontraditional occupations.
 - b. Nontraditional career pathways for females are shown on a list developed by the state of Utah at http://www.schools.utah.gov/cte/nontrad pathways.html.
 - c. Individual state lists may differ. Have students review the nontraditional career lists for their state as posted on the state's education website.
- 4. Examples of nontraditional career opportunities for males
 - a. Broad categories of jobs include many that are in education, health, or service-related areas. Examples are dental assistant, paralegal, LPN, RN, and retail salesperson. According to the National Alliance for Partnerships in Equity (NAPE), when males exhibit aptitudes for caring, decorating, teaching, organizing, cultivating, and communicating, they may be happier, more fulfilled, and more successful in nontraditional occupations.
 - b. Nontraditional career pathways for males are shown on a list developed by the state of Utah at http://www.schools.utah.gov/cte/nontrad_pathways.html.
 - c. Individual state lists may differ. Have students review the nontraditional career lists for their state as posted on the state's education website.

B. Benefits

- 1. Greater job satisfaction because the career matches interests and strengths
- 2. Often higher wages and better employee benefits
- 3. Greater advancement opportunities
- 4. Economic self-sufficiency
- 5. Broader job opportunities

C. Resources

- 1. Share the nontraditional fact sheet from Rutgers University located at http://www.ncrc.rutgers.edu/templates/fastfacts.aspx. The source of the data is the U.S. Department of Labor.
- 2. Have students visit the website of the Illinois Center for Specialized Professional Support (ICSPS) at http://www.icsps.ilstu.edu/.
- 3. Acquaint students with careers in **STEM** (the academic and professional disciplines of science, technology, engineering, and mathematics). The website for women in STEM is http://www.womeninscience.org/.
- 4. Refer students to the "Nontraditional Electronic Newsletter" from the Center for Workforce Development, Southern Illinois University at Carbondale: http://cwd.siu.edu/ge-cteworks.php.

5. Have students check out individual state career and technical education (CTE) sites.

Teaching or Counseling Strategies: Many techniques can be used to help students master this objective. Use VM-A, VM-B, VM-C, and VM-D to facilitate a review of this objective.

Objective 2: Explore nontraditional career opportunities.

Anticipated Problem: What elements should be included in the exploration of nontraditional career opportunities?

- II. Exploring nontraditional career opportunities
 - A. Have students complete a **comprehensive career assessment**—an evaluation and interpretation of one's skills, interests, personality, and aptitudes.
 - B. Review the 16 *career clusters*—groupings of occupations / career specialties used as an organizing tool for curriculum design and instruction. Occupations / career specialties are grouped into the career clusters because they require common knowledge and skills. This definition was taken from the Career Clusters website. Additional information may be found at http://www.careerclusters.org/index.php.
 - C. Have the students search and find gender-neutral careers. A **gender-neutral career** is a career in which both males and females participate and neither gender dominates the field by more than 74 percent.
 - 1. The Bureau of Labor Statistics' *Occupational Outlook Handbook (OOH)* website at http://www.bls.gov/oco/ooh_index.htm may be used.
 - 2. Gender statistics for specific careers can be verified by using the Bureau of Labor Statistics' reports at http://www.bls.gov/cps/wlf-table10-2008.pdf.
 - D. Create access to individuals and experiences in nontraditional careers.
 - 1. Seek persons employed in nontraditional careers to address the students and speak to their individual experiences and challenges.
 - 2. Encourage career fairs with an NTO element.
 - 3. Develop NTO field trips.
 - 4. Encourage work-based learning experiences.
 - 5. Encourage NTO volunteer experiences.
 - 6. Seek professional mentoring resources, such as those found on the Women in Science, Technology, Engineering, and Mathematics ON THE AIR! website: http://www.womeninscience.org/resources.php.
 - E. Help students develop plans for programs of study that may lead to nontraditional careers.
 - F. Have students develop, plan, and record NTO interests and coursework in their ICPs or Senior Project folders.

Teaching or Counseling Strategies: Many techniques can be used to help students master this objective. Use VM–E and VM–F to illustrate the concepts in this objective. Assign LS–A.

- Review/Summary. Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle. Questions at the ends of chapters in the textbook may also be used in the Review/Summary.
- **Application.** Use the included visual master(s) and lab sheet(s) to apply the information presented in the lesson.
- **Evaluation.** Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. A sample written test is provided.

Answers to Sample Test:

Part One: Matching

- 1. d
- 2. e
- 3. f
- 4. c
- 5. b
- 6. a

Part Two: Short Answer

- 1. Answers will vary but should include three of the following benefits of choosing a nontraditional occupation:
 - a. Greater job satisfaction because the career matches interests and strengths
 - b. Often higher wages and better employee benefits
 - c. Greater advancement opportunities
 - d. Economic self-sufficiency
 - e. Broader job opportunities
- 2. Answers will vary but should include three of the following NTOs for women:
 - a. Operating engineers
 - b. Carpenters
 - c. Construction trades workers
 - d. Electricians
 - e. Firefighters and fire prevention personnel
 - f. Airline pilots and navigators

- g. Truck drivers
- h. Mechanical engineers
- i. Industrial engineers
- j. Aerospace engineers
- k. Electrical and electronic engineers
- I. Civil engineers
- m. Chemical engineers
- n. Dentists
- o. Police and detectives
- p. Architects
- q. Farming, forestry, and fishing employees
- 3. Answers will vary but would include three of the following NTOs for men:
 - a. Dental hygienists
 - b. Childcare workers
 - c. Licensed practical nurses
 - d. Speech therapists
 - e. Early childhood teaching assistants
 - f. Registered nurses
 - g. Dieticians
 - h. Occupational therapists
 - i. Librarians, archivists, and curators
 - j. Teachers overall (especially pre-K and kindergarten, elementary, and special education teachers)

Part Three: True/False

- 1. T
- 2. F
- 3. T
- 4. T
- 5. F
- 6. F

Name

Nontraditional Careers

Part One: Matching

Instructions: Match the term with the correct definition.

- a. career clusters
- b. comprehensive career assessment
- c. cross-gender career

- d. gender-neutral career
- e. nontraditional occupation (NTO)
- f. STEM
- ____1. A career in which both males and females participate and neither gender dominates the field by more than 74 percent
 - __2. An occupation in which one gender makes up less than 25 percent of the employment within that field
- _____3. The academic and professional disciplines of science, technology, engineering, and mathematics
- _____4. A job position is in a nontraditional field
- _____5. An evaluation and interpretation of one's skills, interests, personality, and aptitudes
- _____6. Groupings of occupations / career specialties used as an organizing tool for curriculum design and instruction

► Part Two: Short Answer

Instructions: Answer the following.

1. List and describe three benefits of choosing a nontraditional occupation.



2. Cite	three nontraditional occupations for women.
3. Cite	three nontraditional occupations for men.
► Part Thr	ee: True/False
Instructio	ons: Write T for true or F for false.
1.	Nontraditional occupations offer a greater chance for advancement than traditional occupations.
2.	A female kindergarten teacher is an example of an NTO.
3.	A male nurse is an example of an NTO.
4.	Interests in NTO fields should be noted in your ICP.
5.	The best way to assess your career interests in an NTO is to wait until you get to college.
6.	The best career assessment evaluates only your interests.

NONTRADITIONAL CAREER OPPORTUNITIES

A nontraditional occupation (NTO) is an occupation in which one gender makes up less than 25 percent of the employment within that field. A person whose job position is in a nontraditional field is said to possess a cross-gender career.



A firefighter stands next to a hook and ladder truck.

Examples of individuals in cross-gender careers are a male kindergarten teacher and a female firefighter.

NTO career opportunities for females include the broad categories of labor intensive, scientific/technical, and supervisory occupations.

NTO career opportunities for males include the broad categories of education, health, and service-related occupations.

BENEFITS OF CHOOSING AN NTO

- Greater job satisfaction because the career matches YOUR interests and strengths
- Often higher wages and better employee benefits
- Greater advancement opportunities
- Economic self-sufficiency
- Broader job opportunities





EMPLOYMENT FAST FACTS—WOMEN

Women make up:

- ◆ 1.1% of Operating Engineers
- ♦ 1.8% of Carpenters
- ♦ 2.4% of Construction Trades Workers
- ♦ 2.5% of Electricians
- ♦ 4.1% of Firefighters and Fire Prevention Personnel
- ♦ 4.2% of Airline Pilots and Navigators
- ♦ 4.9% of Truck Drivers
- 6.9% of Mechanical Engineers
- ♦ 7.2% of Industrial Engineers
- ♦ 8.1% of Aerospace Engineers
- ♦ 10.3% of Electrical and Electronic Engineers
- ♦ 10.8% of Civil Engineers
- ♦ 16.5% of Chemical Engineers
- ♦ 19.4% of Dentists
- ♦ 18.3% of Police and Detectives
- ♦ 20.1% of Architects
- ♦ 20.6% of Farming, Forestry, and Fishing Employees

SOURCE: U.S. Department of Labor, 2002

EMPLOYMENT FAST FACTS— MEN

Men make up:

- ♦ 1.8% of Dental Hygienists
- ♦ 2.4% of Childcare Workers
- ♦ 5.1% of Licensed Practical Nurses
- ♦ 5.8% of Speech Therapists
- ♦ 6.2% of Early Childhood Teaching Assistants
- ♦ 7.1% of Registered Nurses
- ♦ 9.8% of Dieticians
- ♦ 10.9% of Occupational Therapists
- ♦ 21.2% of Librarians, Archivists, and Curators
- ♦ 25% of Teachers
- ♦ 2.3% of Pre-K and Kindergarten
- ♦ 14.6% of Special Education
- ♦ 17% of Elementary

SOURCE: U.S. Department of Labor, 2002

NTO CAREER OPPORTUNITIES— PART 1

EXPLORE

- 1. Complete a comprehensive career assessment.
- 2. Review the 16 career clusters.
- 3. Search gender-neutral careers—careers in which both males and females participate and neither gender dominates the field by more than 74 percent.
- Bureau of Labor Statistics' Occupational Outlook Handbook (OOH): http://www.bls.gov/oco/ooh index.htm
- Bureau of Labor Statistics' reports to verify gender statistics: http://www.bls.gov/cps/wlf-table10-2008.pdf



Analyze your skills and passions to find your perfect career path.

NTO CAREER OPPORTUNITIES— PART 2

GET THE FACTS FIRSTHAND

- 1. Meet real people who work in nontraditional careers.
- 2. Help create a career fair with an NTO element.
- 3. Go on NTO field trips.
- 4. Pursue work-based learning experiences.
- 5. Pursue volunteer experiences.
- 6. Review professional mentoring resources such as those found at Women in Science, Technology, Engineering, and Mathematics ON THE AIR!: http://www.womeninscience.org/resources.php

DEVELOP PLANS

- 1. Develop a plan with your counselor for programs of study that may lead to an NTO.
- 2. Record your interests and experiences in your ICP or Senior Project folder.



Electrician working on an energized panel.



Nurse taking a patient's blood pressure.

Name

Your Personal Career Assessment

Purpose

The purpose of the activity is to complete a career interest assessment and then to review the nontraditional careers included in your indicated top career cluster.

Objectives

- 1. Assess your career interests.
- 2. Review nontraditional options within your top career cluster.
- 3. Add these results to your ICP or Senior Project folder.
- 4. Strategize with your counselor the next steps as they relate to your career assessment and preparation.

Materials

- ♦ lab sheet
- writing utensil
- computer with Internet access

Procedure

- 1. Complete one career interest inventory. You may use the interest survey on the Career Clusters website at http://www.careerclusters.org/resources/ccinterestsurvey/ InterestSurvey.pdf or another inventory your instructor suggests. Save the results.
- 2. Using the resources identified in this lesson, review the nontraditional options that exist within the indicated cluster.
- 3. Make an appointment with your counselor to further interpret and discuss the results.
- 4. Place the results in your ICP or Senior Project folder.
- 5. Strategize with your counselor the next steps as they relate to your career assessment and preparation.

