

COUNSELOR GUIDE

Empower Your Students...




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Introduction to the ASVAB Career Exploration Program

The ASVAB Career Exploration Program is a comprehensive career exploration and planning program that includes the most widely used multiple-aptitude test battery in the world. The Program also offers an interest inventory and other activities designed to help students explore the world of work and gain confidence in making career decisions.

The ASVAB Program is aimed at students in the 10th, 11th, and 12th grades, as well as students in post-secondary schools. Results of the aptitude test and the interest inventory enable students to evaluate their skills, estimate their performance in academic and vocational endeavors, and identify potentially satisfying careers. The ASVAB Program provides both web-based and printed materials to help students consider their results and explore possible career choices. Structured activities are also available to help students organize the information they need to begin making coursework decisions in line with their tentative career choices. Students are encouraged to consider their own work-related values as they explore the world of work and learn career exploration skills that will benefit them throughout their work lives.

PROGRAM GOALS AND FEATURES

The goal of the ASVAB Career Exploration Program is to give students the opportunity to explore a variety of careers using knowledge they have gained about their interests and skills through assessment components and structured activities. Career development during adolescence and early adulthood is an ongoing process. Students' career plans are still in the formative stages, and these plans will continue to develop and change over time. The ASVAB Career Exploration Program emphasizes the importance of planning and decision making, skills that can benefit students throughout their lives.

The Program is designed to help students:

- ▶ Learn more about themselves and the world of work
- ▶ Explore occupations in line with their interests and skills
- ▶ Develop an effective strategy to realize their career goals

Students are encouraged to explore their tentative career goals and compare their academic preparation against the requirements for entry into desired programs of study or occupations. They can also complete activities designed to help them identify high school courses that will increase their skills and readiness for future education or employment. Seeing the connection between their current educational planning and their future goals will help to foster a greater sense of responsibility for that planning.

The ASVAB Career Exploration Program is designed to be helpful to virtually all students, whether they plan to enter the workforce right away or pursue further education at a university, community college, or vocational institution.

The ASVAB test has been recognized as an important component in career counseling. Ryan Krane and Tirre (2005) have written that the ASVAB test “is distinguished by superior norms, a thorough investigation of test fairness, and unsurpassed criterion-related validity data” (p. 346). In addition, they point out that objective ability assessments such as the ASVAB test are more accurate and useful than other ability self-estimate assessments. In self-estimate assessments, people tend to underestimate their own abilities and thus limit their career choices. Objective ability assessments can help people override false beliefs about potential career paths and also encourage them to explore new career avenues.

Career development experts and career counselors from universities across the country reviewed key components of the ASVAB Career Exploration Program to ensure its soundness and accuracy.

OVERVIEW OF PROGRAM COMPONENTS

The major components of the ASVAB Career Exploration Program are listed in Table 1-1 and described in more detail in this chapter.

With results from the ASVAB test and the FYI (Find Your Interests), students can explore occupations. Together with their parents, counselors, and teachers, they can begin to develop initial educational and career plans.



Table 1-1. ASVAB Program Components

Program Component	Description
ASVAB Test	<p>Multiple-aptitude battery that tests a student's knowledge in eight areas including: general science, mathematics, word knowledge, paragraph comprehension, electronics information, auto and shop information, and mechanical comprehension.</p> <p>Results are presented on an ASVAB Summary Results sheet, a report that describes standard and percentile scores on individual ASVAB tests, Career Exploration Score composites, and military entrance score.</p>
ASVAB Summary Results	A score report provided to students that describes standard and percentile scores on individual ASVAB tests, Career Exploration Score composites, and military entrance score.
FYI (Find Your Interests)	A 90-item RIASEC-based interest inventory designed to help students identify their work-related interests.
<i>Exploring Careers: The ASVAB Career Exploration Guide</i>	<p>A guide designed to help students:</p> <ul style="list-style-type: none"> ▶ Understand and use their ASVAB scores for career exploration with the OCCU-Find, a list of more than 400 occupations grouped by the six RIASEC interest areas ▶ Learn about sources of occupational information ▶ Consider work-related values when making career decisions ▶ Evaluate their current academic preparation for admission or entry into a program of study or an occupation ▶ Learn about various educational opportunities ▶ Learn planning and career decision-making skills
www.asvabprogram.com	Program website that contains the online FYI and OCCU-Find. Has links to the Occupational Outlook Handbook, O*NET OnLine, www.careersinthemilitary.com , and Career Clusters. Includes online tutorials, newsletters, games, and career videos. Also provides additional resources for counselors such as idea sheets, coursework planner, and more.
www.careersinthemilitary.com	Website that complements <i>Military Careers</i> by providing more extensive information about job duties for approximately 140 military occupations.
My Educational and Career Plans	An activity for students to help make future education and career plans. This is available online at the Plan for Your Future section of www.asvabprogram.com .
Coursework Planner	A worksheet to help students plan their remaining high school courses based on tentative career choices. This is available online in Plan for Your Future section of www.asvabprogram.com .

These materials were developed to help schools meet the National Standards for School Counseling Programs set forth by the American School Counselors Association (ASCA) and the Career Development Competencies established by the National Career Development Association (NCDA). Visit www.schoolcounselors.org and www.NCDA.org for a copy of ASCA standards and NCDA career development competencies.

THE ASVAB TEST

The ASVAB is the most widely used multiple-aptitude test battery in the world. It consists of eight tests, contains a total of 200 items, and requires three hours to complete (134 minutes of actual test time and 36 minutes of administration time). Each test is strictly timed, with permitted time ranging from 9 minutes for the 20-item Electronics Information test to 36 minutes for the 30-item Arithmetic Reasoning test. Table 1-2

shows the number of items and time limits for each test. Sample items for each of the eight tests are provided in *The ASVAB Career Exploration Program Overview Guide* (see Table 2-2 on p. 12).

The ASVAB test has been updated frequently. The current student versions (Forms 23 and 24) are interchangeable with previous ASVAB forms. Forms 23 and 24 of the ASVAB test consist of eight power tests. Power tests allow maximum performance with generous time limits.

Table 1-2. ASVAB Tests

Tests	Description	Test Time
(GS) General Science	25-item test measuring knowledge of life science, earth and space science, and physical science.	11 minutes
(AR) Arithmetic Reasoning	30-item test measuring ability to solve basic arithmetic word problems.	36 minutes
(WK) Word Knowledge	35-item test measuring ability to understand the meaning of words through synonyms.	11 minutes
(PC) Paragraph Comprehension	15-item test measuring ability to obtain information from written material.	13 minutes
(MK) Mathematics Knowledge	25-item test measuring knowledge of mathematical concepts and applications.	24 minutes
(EI) Electronics Information	20-item test of knowledge of electrical current, circuits, devices, and electronic systems.	9 minutes
(AS) Auto & Shop Information	25-item test measuring knowledge of automotive maintenance and repair, and wood and metal shop practices.	11 minutes
(MC) Mechanical Comprehension	25-item test measuring knowledge of the principles of mechanical devices, structural support, and properties of materials.	19 minutes
TOTALS	200 Items	134 minutes
ADMINISTRATIVE TIME		36 minutes
TOTAL TESTING TIME		170 minutes

EXPLORING CAREERS: THE ASVAB CAREER EXPLORATION GUIDE

Exploring Careers: The ASVAB Career Exploration Guide introduces students to career exploration and planning. It provides an appealing and engaging framework that helps students focus on their future and begin to identify their career interests. Students also learn how to apply the knowledge they have gained about their interests, skills, and work values to career exploration.

The *Guide* can be used in a number of ways. Counselors and teachers may want students to use the *Guide* in class, in a small group setting, or even independently at home. The two primary components of the *Guide* are the **FYI (Find Your Interests)** and the OCCU-Find.

FYI (Find Your Interests)

The **FYI** is a 90-item interest inventory based on John Holland's (1973, 1985, 1997) widely accepted theory and taxonomy of career choice. Students respond to items by indicating a preference for the various activities presented to them. Based on the answers to these questions, the inventory determines the student's resemblance to each of six interest types (RIASEC types). (A brief introduction to the theory and a description of the RIASEC types can be found in the Appendix. The **FYI** is provided with *Exploring Careers: The ASVAB Career Exploration Guide* and is also available on www.asvabprogram.com for students who have taken the ASVAB.



Students can complete the **FYI** in about 10 minutes with little or no assistance. Most students easily understand the instructions for scoring the **FYI**. After scoring the **FYI** and considering the influence of gender on their scores, students identify their three highest Interest Codes. Students use these Interest Codes along with their ASVAB Career Exploration Scores to identify potentially satisfying occupations for exploration. A summary of the technical research supporting the **FYI** is available on the ASVAB website.

The OCCU-Find

The OCCU-Find organizes more than 400 occupations by Interest Codes so students can quickly identify the occupations that match their own interests. It provides students with important information derived from the Occupational Information Network (O*NET) occupational database. For example, the importance of verbal, math, and science/technical skills for each occupation is listed so students can determine the degree to which these broad skills are needed for jobs that interest them.

The OCCU-Find invites students to further investigate their tentative career choices. Students can refer to appropriate printed materials and websites for more information about their selections. These sources include the www.asvabprogram.com, *Occupational Outlook Handbook* (U.S. Department of Labor, 2010-11), O*NET OnLine, www.careersinthemilitary.com, and Career Clusters.

The technical underpinnings of the OCCU-Find and a summary of the research supporting it are reported in the *Technical Chapter* found at www.asvabprogram.com.

CAREER EXPLORATION WEBSITES

The following websites are designed to complement the ASVAB Program. Both websites encourage students to explore a wide variety of occupations based on their ASVAB test scores and FYI Interest Codes. The ASVAB Program website also contains information for parents and instructional tools for teachers. The two primary websites for the ASVAB Program are www.asvabprogram.com and www.careersinthemilitary.com.

www.asvabprogram.com

The ASVAB Program website (see Figure 1-1) provides enhanced information about the ASVAB Career Exploration Program for students, parents, educators, and counselors (see Table 1-3). Counselors and educators can download program materials such as Fact Sheets that introduce students and parents to the ASVAB Program and highlight its key components. Counselors can also download this document as well as guided career exploration and planning activities that educators can use with students.

In addition, the website promotes career exploration. Students can take the FYI online using the access codes that they receive on their ASVAB Summary Results sheet (see Figure 1-2). With the same access code, students can also access an expanded version of the OCCU-Find. The OCCU-Find provides links to occupational information resources where students can: view descriptions of careers; watch career videos; learn about Career Clusters and pathways (see Figure 1-3); and compare their skills with those required in occupations they're exploring. These online resources include the *Occupational Outlook Handbook* (U.S. Department of Labor, 2010-11), *O*NET Online*, www.careersinthemilitary.com, and Career Clusters.



Figure 1-1. ASVAB Program Website

Figure 1-2. ASVAB Summary Results sheet showing access code.

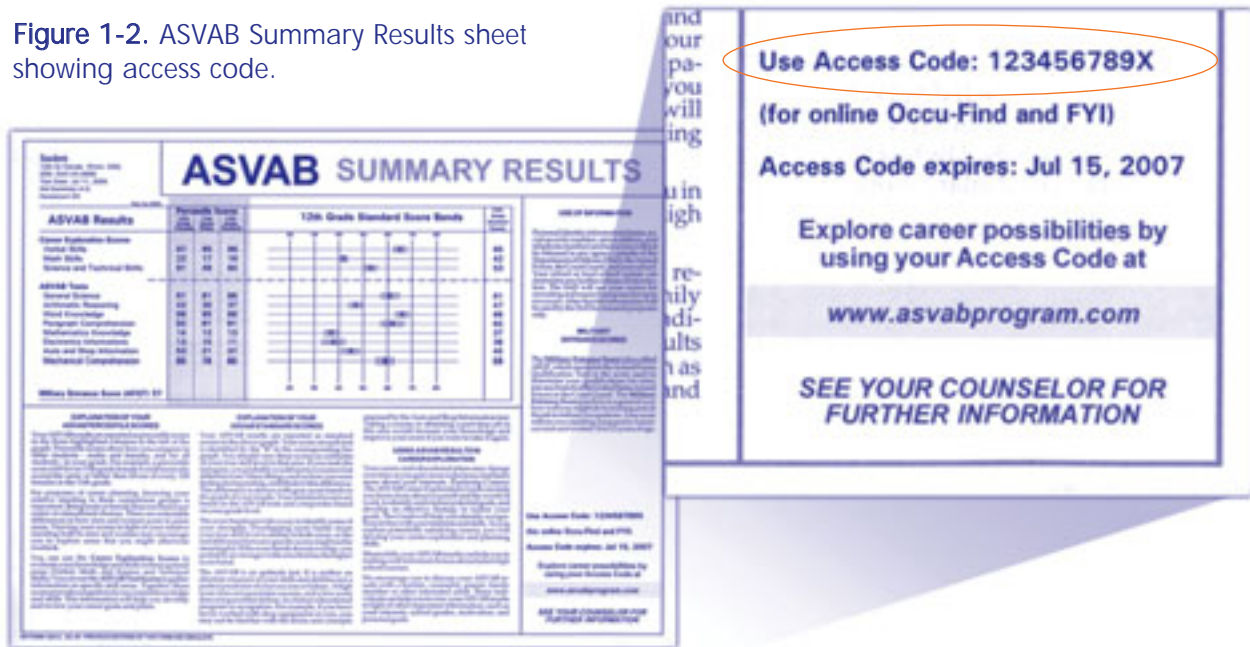


Table 1-3. Online Features

Feature	Description
FYI	Allows students to complete the FYI in about 10 minutes, provides automatic scoring descriptions of the RIASEC Codes and explains the gender-based scores.
Tutorials	Provides in-depth explanation of program elements in an easy to follow format.
Game Arcade	Teaches students more about the RIASEC codes, Career Clusters and different occupations with interactive games.
MyASVAB Portfolio	Permits students to bookmark their favorite occupations and career clusters for an at-a-glance view of their career exploration.
OCCU-Find	Organizes more than 400 occupations alphabetically and students can sort by RIASEC Codes and Career Clusters. They can link directly to O*NET Online, Occupational Outlook Handbook, Career Clusters, and careersinthemilitary.com . They can even view day-in-the-life videos as well as compare their top picks side by side.
Newsletters	Presents hot topics and discussions for counselors, students, and parents.
Idea Sheets	Gets students thinking about their future.

Figure 1-3. Career Clusters



www.asvabprogram.com, contains the OCCU-Find and the FYI as well as links to the *Occupational Outlook Handbook*, O*NET™ Online, www.careersinthemilitary.com, and Career Clusters.

www.careersinthemilitary.com

[Careersinthemilitary.com](http://www.careersinthemilitary.com) is the leading career information resource for the military world of work. The website provides an overview of enlisted and officer occupations in all of the military Services. It contains information about the type of work performed, training, advancement opportunities, employment for a sample of Army, Navy, Air Force, Marine Corps, and Coast Guard careers and information about civilian counterparts. Even if a student is not interested in joining the military, he or she can use www.careersinthemilitary.com to learn more about occupations of interest.

Students who do not have Internet access can browse the publication, *Military Careers*, which summarizes occupational opportunities in the military and includes profiles of servicemembers.

Figure 1-4. *Occupational Outlook Handbook*, O*NET Online, and www.careersinthemilitary.com.



ADDITIONAL CAREER PLANNING TOOLS

Additional activities and tools can make the career exploration and planning process a richer experience for students. After students have identified tentative occupational choices based on their interests and skills, they are encouraged to explore these choices further, by planning the remainder of their high school courses and clarifying their post-high school goals. We provide them with the following activities and tools:

- ▶ **My ASVAB Portfolio.** This online portfolio gives students a broader view of their career interests by allowing them to view their interest codes, favorite occupations and career clusters in one place.
- ▶ **My Educational and Career Plans Summary Sheet.** This worksheet encourages students to explore occupations based on their interests, past experiences, work values, and post-high school goals.
**Students can access this feature using their access code.*
- ▶ **Coursework Planner.** This activity helps students determine what remaining high school courses they should take based on the requirements for occupations that interest them.
- ▶ **Idea Sheets.** Activities on these sheets help teachers and counselors integrate the ASVAB Program into the classroom.

These three activities can be downloaded from the **Educator and Counselor** section of www.asvabprogram.com.



Figure 1-5. MyASVAB Portfolio



Figure 1-6. Coursework Planner



ASVAB Test Administration in Your School

Administering the ASVAB is similar to administering any standardized achievement test. This chapter will describe the support personnel who oversee and coordinate test administration. It will also highlight promotional materials that you can pass on to students and outline procedures for test administration at your school.

ASVAB SUPPORT PERSONNEL

One of the strengths of the ASVAB Career Exploration Program is the extensive support network that is available to you. Many individuals are involved in the ASVAB test administration process from the time schools are initially contacted through

the return and interpretation of students' results. Various resource people are available from the Department of Defense (DoD) to aid counselors in the testing process.

In general, the **Education Services Specialist (ESS)** is the primary point of contact for counselors throughout this process. ESSs are civilian DoD employees with training and experience in education and testing. These educational professionals work with schools and counselors to help ensure that schools and students get the most out of the ASVAB Program. These specialists provide training in explaining ASVAB test and **FYI (Find Your Interests)** scores, assist with the mechanics of the testing arrangements, and support counselors who use the ASVAB Program in their schools.

An ESS is available at each Military Entrance Processing Station (MEPS). Contact information is available from the following toll-free number: 1-800-323-0513, or from the counselor section of our website at www.asvabprogram.com.

Counselors may also be in contact with some other resource people. Descriptions of the primary resource people related to ASVAB testing are listed in Table 2-1.

ESSs and recruiters are also available to speak at school functions such as assemblies, career fairs, and PTA and other parent meetings. You can make arrangements for a speaker by contacting your local ESS or Military Service representatives.

Table 2-1. ASVAB Support Personnel

Name	Description	Responsibilities
Education Services Specialists	Civilian government employees with training and experience in education who serve as liaisons with the education community.	Provide schools with resource materials for the ASVAB Career Exploration Program, train counselors on how to interpret ASVAB scores, and educate counselors and students on strategies for exploring careers using ASVAB results.
Military Education Specialists	Government employees who also work with educators.	Provide support and assistance in areas related to the administration of the ASVAB in schools.
Test Coordinator	MEPS employee who coordinates the scheduling of ASVAB testing in the schools.	Finalizes scheduled testing dates, determines the availability of test administrators and proctors, and ensures that the ASVAB results are returned to the school. Can also provide advice to school personnel regarding the need for proctors.
Test Administrators and Proctors	DoD or other government employees who ensure secure testing.	Provide security of the test booklets.
Recruiters	Military employees who identify and screen individuals for their particular service.	Contact prospective enlistees and advise them about job and career opportunities in their Service. Contact schools regarding the ASVAB and make preliminary arrangements for testing. May assist in the testing situation as proctors, talk with students about military opportunities, and/or help in the explanation of the ASVAB and FYI results.

Table 2-2. ASVAB Program Resource Material

Item	Description	Purpose
ASVAB Career Exploration Program Overview Guide	Highlights key elements of the program such as content, use of test information, and practice questions.	Provides a working knowledge of the ASVAB Program to students interested in taking the test and their parents.
How to do an ASVAB Test Interpretation Session	Provides information on how to interpret ASVAB scores, administration and scoring of the FYI, and how to explore careers using the OCCU-Find.	Serves as training tool for counselors and Education Services Specialists.
Poster	Presents key information about the ASVAB Career Exploration Program for students.	Encourages students to participate in the program.

PROMOTIONAL MATERIALS

The promotional publications listed in Table 2-2 can help you explain the ASVAB Program to students, parents, and faculty. You can also encourage them to visit www.asvabprogram.com where there are several pages specifically for parents.

You can obtain copies of these materials from your local ASVAB Program representatives by calling your local Military Entrance Processing Station (MEPS) toll-free at 1-800-323-0513.

CHALLENGE:

I have students asking for information about the ASVAB, but I don't have materials to give them.

Contact your local ESS (1-800-323-0513) for informational brochures and copies of the Overview Guide. Also, direct students to the ASVAB website—www.asvabprogram.com—where they can learn about the exam and career exploration.

PREPARING FOR TEST ADMINISTRATION

Once you have decided to offer the ASVAB Career Exploration Program at your school, you will need to consider the following factors as you plan for ASVAB testing.

ASVAB Program Costs

There are no direct costs associated with adopting the ASVAB Program. DoD provides the test materials, administration and scoring services, resource personnel, and reference materials at no cost to schools or students.

Student Eligibility for ASVAB Testing

The ASVAB has nationally representative norms for the 10th, 11th, and 12th grades and for postsecondary students. Consequently, freshmen in high school are not permitted to participate in the ASVAB Program.

Scheduling the Testing Session

You should work with the local ASVAB representative to schedule the testing session. You will need to consider the school calendar, other tests that will occur during the school year, activities that might compete for students' time and attention, and any local events that might affect students' participation in the program.

Time Required for Testing

In most cases, a three-hour block of time is necessary for administering the battery. For larger test sessions, more time will be necessary. For groups of 100 or more, an additional 15-20 minutes should be scheduled. This is because it will take longer to hand out and collect the materials, ensure that the students have followed the directions, and handle other administrative details. For really large groups (e.g., 200 students or more), you should talk with your ESS. Make time for a future post-test career seminar

Room Arrangements

The testing facilities should conform to good testing procedures. Ideally, the facilities need to be well lit, ventilated, comfortable, free of extraneous noise and interruptions, and with sufficient flat work surfaces to accommodate the number of students taking the test.

Proctors

The ASVAB is a secure test, so maintaining test security is of paramount importance. Test security requires a minimum of one proctor for every 40 students to be tested. To create a familiar atmosphere, it is highly useful for counselors and school personnel to attend the session or serve as proctors if needed. The military Services will also provide proctors for the test.

Counselor Codes

If student results are to be distributed to more than one counselor, counselor codes can be used. In this case, the school assigns a three-digit counselor code to each counselor. On the day of testing, students enter the appropriate counselor code on their answer sheets. The ASVAB Summary Results will be grouped alphabetically, within grade, by counselor code. At the school's discretion, the code also can be used to group student results by other school-designated divisions, such as homeroom.

Privacy

ASVAB testing does not require a signed parental release statement. The ASVAB is exempt from the provisions of the Family Educational Rights and Privacy

Act of 1974 (the Buckley Amendment) that require a signed parental release statement. In 1974, the General Counsels of both DoD and the Department of Health, Education, and Welfare, ruled that ASVAB test results become records of the school only after those results are provided to the schools.

Options for Recruiter Contact

Table 2-3 shows eight options for releasing ASVAB test results to military recruiters. ASVAB test results are withheld from the military Services for at least seven business days to allow counselors time to distribute the results and counsel students. You may wish to have additional time to discuss the results with students before any recruiter contact. Review the score reporting options in Table 2-3. The option you select will apply for all students taking the ASVAB test at your school during the scheduled test sessions.

Table 2-3. Options for Recruiter Contact

Option 1	Option 2	Option 3	Option 4
No special instructions. Release results to recruiting military Services 7 days after test scores are mailed.	Release results to recruiters 60 days after test scores are mailed. No recruiter contact prior to that time.	Release results to recruiters 90 days after test scores are mailed. No recruiter contact prior to that time.	Release results to recruiters 120 days after test scores are mailed. No recruiter contact prior to that time.
Option 5	Option 6	Option 7	Option 8
Release results to recruiters at the end of the school year. No recruiter contact prior to that time.	Release results to military Services 7 days after test scores are mailed. No telephone solicitations by recruiter based on the student names provided with the listing of student results.	Not valid for enlistment purposes. Results not released to recruiting military Services.	No recruiter contact from this listing of student results. Results not released to recruiting military Services.

These options apply only to recruiter contact efforts resulting from ASVAB testing. Students in grades 11 and 12 and postsecondary students may be contacted by military recruiters independent of ASVAB testing. It is important to note that recruiting personnel encourage high school students to graduate before enlisting into the military Services. In fact, a recruiter must notify the school if a non-graduate tries to enlist.

Additional Issues to Consider

Throughout the testing process, you will play a central role. Your involvement will help to ensure that the testing process is a positive experience for students and that they are able to make optimal use of the test results. In planning for testing, you will need to consider such things as how ASVAB test results can be used most effectively in your school and which students will benefit the most from ASVAB testing. The following list of questions highlights some issues associated with administering the ASVAB Program. Answering these questions ahead of time will help you ensure a positive test and post-test environment for your students.

- ▶ How will the school use the ASVAB Program?
 - ▶ Which grade levels would benefit the most from testing?
 - ▶ Who will take the ASVAB test?
 - ▶ What activities will be conducted to inform students, parents, and faculty about ASVAB testing?
 - ▶ When will the test be administered?
 - ▶ Where will students take the test?
 - ▶ What school staff are available that might serve as test proctors if necessary?
 - ▶ Who (e.g., students, parents, faculty) will receive feedback on the ASVAB testing?
 - ▶ What type of feedback will be provided?
 - ▶ What assistance will students receive to help them understand their results?
- ▶ What counseling will be provided using the ASVAB results?
 - ▶ What other school or district personnel need to be informed about the ASVAB testing plan?

Test Administration

Testing in the ASVAB Program is a two-part process. The first part consists of announcing the ASVAB test to students and administering the test to them. The second part involves setting up an interpretation session in which students can review their scores, take the **FYI**, and do preliminary career exploration using their results. Test support personnel including

CHALLENGE:

My students do not want to take a test associated with the military.

First, remind students that the high-school version of the ASVAB is not primarily for use by the military. In fact, in a national survey, most participants in the ASVAB Program stated that they were not interested in joining the military. Then, emphasize that the ASVAB Career Exploration Program can give students an idea of their current interests, strengths and weaknesses, and help them learn about a wide range of careers regardless of their post-high school plans. You can also show students the video that explains the benefits of the Program.

Education Services Specialists, Military Education Specialists, and military recruiters are resources for you in developing your testing plan. Throughout the testing process, you will work as a team with different and overlapping responsibilities.

The following table summarizes counselors' and the Military Services Representatives' roles and responsibilities in each of the test administration and post-administration/interpretation phases.

Table 2-4. Test Administration Responsibilities

Pre-Test Responsibilities

Counselors	ESS
Request ASVAB informational materials	Provide ASVAB Program informational materials
Verify testing schedule	Finalize and agree upon the testing schedule
	Participate in ASVAB Program awareness activities

Test-Day Responsibilities

Counselors	ESS
Provide facilities for testing	Provide testing materials
Introduce the test and be present to support an optimal testing environment	Provide a test administrator
	Provide proctors, as needed
	Take student answer sheets for scoring
	Secure testing materials for future use

Post-Test Responsibilities

Counselors	ESS
Support test interpretation session, as requested	Provide interpretation session on test results to students, as requested
Distribute test results to students	Return test results to the school
Request supportive materials for interpretation	Provide ASVAB resource materials, as requested by counselors
	Provide sufficient number of copies of <i>Exploring Careers: The ASVAB Career Exploration Guide</i>
	Arrange for scoring student answer sheets
	Provide technical support, as requested by counselors



The ASVAB Program and Career Exploration

This chapter provides you with suggestions for helping students use their ASVAB test results for career exploration. It walks you through the major components of *Exploring Careers: The ASVAB Career Exploration Guide*, presents time estimates for each component of the *Guide*, and offers options for conducting career exploration activities with students. You can use this information to consider the best approach for your school and modify the content to suit your specific needs and the needs of your students.

The ASVAB Career Exploration Program helps students see connections between their current educational planning and their future goals.

DEVELOPING A CAREER EXPLORATION ACTIVITIES PLAN

It is very important that you develop a post-test interpretation session after the students have completed the ASVAB test. This session is the heart of the ASVAB Program. The session typically takes place after the school receives the ASVAB Summary Results. The post-test session focuses on the use of the ASVAB test results for career exploration. In addition, it includes administration, scoring, and interpretation of the **FYI (Find Your Interests)**. Typically, civilian DoD Education Service Specialists lead the post-test interpretation (or train school or military personnel to conduct a session). In this session, students learn how to use their test scores along with the online OCCU-Find and *Exploring Careers: The ASVAB Career Exploration Guide* to begin the career exploration process. The post-test interpretation session also should

Counselor-facilitated discussion of ASVAB Program materials is important because it:

- ▶ Ensures that students' interpretations of their ASVAB test and FYI results are accurate
- ▶ Allows you to determine the extent to which the ASVAB test results are consistent with each student's grades and other test results
- ▶ Presents an opportunity to discuss how intervening circumstances, such as illness, might have influenced performance on the day of testing
- ▶ Allows you to show how Career Exploration Scores and OCCU-Find Skill Importance Ratings work together
- ▶ Ensures that supplemental materials such as *My Educational and Career Plans* and the *Coursework Planner* are used effectively for career exploration

review the role of gender in the development of career interests and skills and ways that students can improve their academic performance, thereby enhancing their career options. Knowing that your time is at a premium, and how difficult it can be to arrange meetings with groups of students, we have tried to make the interpretive materials as self-guiding as possible so that students can use them independently. There are, however, times when counselor-facilitated discussion and review greatly enhances both the process and the outcome for students.

Remind students that they are in a process of discovery and should consider as many career interests as possible.

CHALLENGE:

Due to scheduling constraints, less than 40 minutes has been allocated for the ASVAB post-test interpretation session.

*If you have limited time for a test interpretation session, refer students to www.asvabprogram.com beforehand, where they can view tutorials that explain their test scores and how to explore careers. If students do not have Internet access, consider distributing **Exploring Careers: The ASVAB Career Exploration Guide** to students a few days prior to the scheduled interpretation session.*

*Students can then read **Exploring Careers: The ASVAB Career Exploration Guide** ahead of time, take the FYI on their own, and bring their FYI results to the interpretation session. During the post-test interpretation session, you or your local ESS can explain the ASVAB test results, answer student questions about the FYI, and show students how to use their results with the OCCU-Find to explore careers.*

Note: ASVAB test scores should not be handed out ahead of time.

Empower Your Students...



With the ASVAB Program, students can benefit from learning about themselves and various career options. Through informed exploration and planning, students have a unique opportunity to find potential careers that can be richly satisfying. Also, they can rule out options that may not be suitable without investing time and money studying a field that won't be satisfying.

Estimated Time Requirements for ASVAB Program Materials

Exploring Careers: The ASVAB Career Exploration Guide is designed so that you have considerable flexibility in using it with students. You can use the *Guide* in a career guidance class or combine homework assignments with individual, small group, or classroom sessions. As you read this chapter, it would be useful to have your copy of the *Guide* open.

Tables 3-1 and 3-2 on page 20 outline the key components of *Exploring Careers: The ASVAB Career Exploration Guide* and the ASVAB website—www.asvabprogram.com—along with the estimated time required to cover each section. You can use these estimates as a guideline in planning an interpretation session. A discussion of ways to cover the material (both in class and outside of class) follows.

My Educational and Career Plans, Coursework Planner, and several Idea Sheets are also available at www.asvabprogram.com.

Options for Using ASVAB Program Materials

One of the strengths of the ASVAB Program is that you can decide how to use the materials to suit your needs and preferences. If you have more than one class period available to work with students, you can spend more time helping students so that they have a more thorough understanding of the concepts presented. Idea sheets will help prompt in-class discussions surrounding topics that include FYI results, educational requirements, and career exploration results. These discussions will help students gain insight into their goals. Additionally, incorporating real-world experience via guest speakers, job-shadowing days, or conducting informational interviews enhances their knowledge and experience.

Your students will benefit the most if the ASVAB Program is integrated into the school's curriculum. Establishing career goals and identifying the necessary education and other requirements for potential careers allows students to see the link between school and work. An increased awareness of how their current school coursework relates to their career goals may encourage students to better apply themselves.

We recommend incorporating this program into the school's curriculum (e.g., through an English, Communications, or Computer Science class). With teacher and/or counselor guidance, students will be more likely to apply the information provided in a meaningful way. Furthermore, the activities included as part of the ASVAB Program are appropriate for a combination of in-class and outside-of-class assignments.

Table 3-1. Estimated Time Requirements for Materials in the Career Exploration Guide

Career Exploration Guide Section	Page #	Content	Estimated Time
Interests	3-13	Describes interpretation of FYI results, the influence of gender on interest codes, and includes descriptions of each of the RIASEC types.	10 min.
FYI (Find Your Interests)		Includes the FYI and scoring instructions.	15-20 min.
Skills and Abilities	14-15	Provides an explanation of ASVAB results, describes how to use the ASVAB scores with the OCCU-Find, and suggests ways to improve skills.	10 min.
Work Values	16-17	Describes work values that are relevant in choosing a career and provides examples.	5 min.
Educational Opportunities	20-22	Presents a variety of educational paths that students can take and provides case examples.	5 min.
Types of Employers	23	Describes the impact that different types of employers (e.g., military, private sector) may have on job experiences.	5 min.
The OCCU-Find	24-41	Describes how students can use their FYI results and ASVAB scores to explore occupations; a chart with information on more than 400 occupations, sorted by RIASEC codes. Includes the following: <ul style="list-style-type: none"> ▶ Secondary Interest Code - the second most common RIASEC code associated with the occupation ▶ Skill Importance Ratings - relative importance of Verbal, Math, and Science and Technical skills for success in each occupation 	15 min.
Career Clusters	42	Provides information about Career Clusters and Pathways.	5 min.
Let's Review/Wrap-Up	43	Lists steps that students can take to continue their career exploration.	5 min.

Table 3-2. Estimated Time Requirements for Materials on the ASVAB Website

Website Activity	Content	Estimated Time
FYI	Online FYI with automatic scoring, descriptions of the RIASEC types, and explanation of gender-based scores.	10 min.
OCCU-Find	More than 400 occupations sorted by RIASEC codes and Skill Importance Ratings. Links into O*NET OnLine, <i>Occupational Outlook Handbook</i> , Career Clusters, and careesinthemilitary.com provide more detailed information about each occupation.	20 min.
My Educational and Career Plans	Thought-provoking printable activities to help students make future career and education plans.	30 min.
Coursework Planner	Print this activity to help students plan their remaining high school courses based on tentative career choices.	30 min.
Idea Sheets	Classroom activities designed to relate high school studies to career choices.	30 min.
ASVAB Portfolio	Online portfolio that allows students to bookmark their favorite occupations and career clusters.	—

In addition, by reviewing the ASVAB results with students, you may be able to help enhance their school engagement. Research has supported the idea that helping students to become more focused on their long-term career goals can help to stimulate greater levels of engagement and motivation at school. Workshops and post-test sessions that explicitly link students' futures with their performance in school can be maximally helpful in promoting student engagement.

INTERPRETING ASVAB TEST RESULTS

ASVAB test results are provided on the ASVAB Summary Results sheet (see Figure 3-1). This report shows grade-specific standard scores and score

bands for all eight tests as well as three Career Exploration Scores. It also provides students with percentile-based scores. The ASVAB Summary Results sheet includes appropriate explanations of the scores and suggestions for their use. In addition, students receive a Military Entrance Score. This score, also called the Armed Forces Qualification Test (AFQT) score, is the score that determines whether a student has scored high enough to meet the entrance requirements for military service.

Counselors also receive a copy of the ASVAB Summary Results for each student. This copy will be useful for talking with students about their ASVAB test results and can be placed in the student's file, if desired. It is important for students to understand their ASVAB test results to begin career exploration. Your assistance in helping them draw accurate conclusions is crucial so that they can see how their results relate to their

ASVAB Summary Results Sheet					
ASVAB Results	Percentile Scores			12th Grade Standard Score Bands	12th Grade Standard Score
	12th Grade Females	12th Grade Males	12th Grade Students		
Career Exploration Scores					
Verbal Skills	97	95	96	65	65
Math Skills	22	17	19	42	42
Science and Technical Skills	81	48	64	53	53
ASVAB Tests					
General Science	91	81	86	61	61
Arithmetic Reasoning	43	30	37	47	47
Word Knowledge	98	95	96	66	66
Paragraph Comprehension	92	91	91	62	62
Mathematics Knowledge	14	12	13	37	37
Electronics Information	13	10	11	38	38
Auto and Shop Information	53	21	37	45	45
Mechanical Comprehension	95	76	65	59	59
Military Entrance Score (AFQT)	57				

Figure 3-1. ASVAB Summary Results sheet.

current abilities and skills. Students need to understand what the scores mean, how they scored on each of the eight ASVAB tests and the three Career Exploration Score composites, and what the implications are for each score.

After distributing the ASVAB Summary Results sheets, you might want to begin by reviewing the purpose of the ASVAB. Next, “walk students through” the explanations and interpretation information provided on the front of the score sheet and the definitions of the tests and Career Exploration Scores on the back. In this process, you might ask students the following questions:

- ▶ Do you understand your standard and percentile scores?
- ▶ What were your reactions to your percentile scores?
- ▶ Did the tests give you a chance to show what you could do?
- ▶ Would you like to change any of your scores? If so, in what ways?



These questions should help initiate important discussion. You may find the following definitions useful for facilitating the discussion and providing explanations to your students.

Standard Scores

The students' scores on the eight ASVAB tests and the three Career Exploration Score composites are reported as both standard and percentile scores. A standard score is calculated by converting the student's raw score based on a standard distribution of scores with a mean of 50 and a standard deviation of 10. On the ASVAB Summary Results sheet, the standard scores are provided and shown in a graph with the corresponding error bands. You might emphasize to students that test scores are never an exact measure of skills and abilities. If they took the test again, their scores might change somewhat. The error bands show them the range that their scores would probably fall in if they took the test again. When working with students, you might tell them that the standard scores are not like what they are used to seeing—where the scores range from 1 to 100 with the majority of students scoring between 70 and 100. With standard scores, the majority of students score between 30 and 70. This means that a standard score of 50 is an average score and a score of 60 would be an above average score.

You might want to focus students' attention on the graph of the standard scores to see if any of their score bands stand out (i.e., are located to the left or the right of the other score bands). Such scores would suggest either a strength (to the right of the others) or a weakness (to the left of the others). This is helpful information for students to take into consideration as they consider various career options.

Percentile Scores

While standard scores are familiar to psychometricians, we find percentile scores more useful for students. Percentile scores indicate how well each student did in relation to others in the same grade. For each test and composite, students receive a same grade/same sex, same grade/opposite sex, and same grade/combined sex percentile score. In explaining a percentile score to a student, it is helpful to use the following phrase: “as well as or better than X out of 100 students of (name the norm group).” For example, for a female 11th grader with a same grade/same sex percentile score of 72 on Math Skills, you could say: “You scored as well or better than 72 out of 100 11th grade females in Math Skills.” It is important for students to understand that the percentile scores are not the same as percent correct. In addition, there are no passing or failing percentile scores.

It is important for students to understand that the percentile scores are not the same as percent correct. In addition, there are no passing or failing percentile scores.

Because the experiences of males and females differ, they can score somewhat differently on the ASVAB tests. On the more technically-oriented tests, such as Electronics Information, the mean performance of males is higher than that of females. This does not mean that women cannot learn this information or that they should be discouraged from considering occupations in related areas. Typically, these differences occur because more males than females have had exposure to electronic principles and related

learning opportunities. As a result, it is optimal to report how students do when compared to their own sex but also to let them know how they compare to the opposite sex on tests that might be important to them. For example, a female student might be interested in a career in mechanics, surveying, or civil engineering. Knowing how she scores relative to her own sex and the opposite sex is useful information. In the past, these career fields have traditionally been populated by males. Since she will be competing with males, it is important for her to know how she stands relative to males. The same is true for males interested in occupations traditionally populated by females.

Career Exploration Scores

The ASVAB test provides results for three factors or composite scores: Verbal Skills, Math Skills, and Science and Technical Skills (see Table 3-3 on p. 24). With students, these composites are referred to as Career Exploration Scores. These Career Exploration Scores give students an estimate of their verbal, math, and science and technical skills as compared to other students in the same grade. These three factors can be used by students to connect with occupations that best match their specific interests and skill sets.

In addition to their ASVAB test scores, students receive three composite scores to help them begin their career exploration. These scores give students a good sense of their verbal, math, and science and technical skills compared to other students in the same grade.

Table 3-3. Description of Career Exploration Scores

Career Exploration Scores	Description
Verbal Skills	A general measure of language and reading skills which combines results from the Word Knowledge and Paragraph Comprehension tests.
Math Skills	A general measure of mathematics skills which combines results from the Mathematics Knowledge and Arithmetic Reasoning tests.
Science and Technical Skills	A general measure of science and technical skills which combines results from the General Science, Electronics Information, and Mechanical Comprehension tests.

Students' scores on these three ASVAB composites can be viewed as snapshots of their current knowledge, skills, and abilities (KSAs) in the verbal, math, and science and technical domains. These KSAs, in turn, can be linked to the KSAs required for successful performance of tasks in different occupations.

The Skill Importance Ratings in the OCCU-Find were generated by analysts who reviewed the job descriptions of each of the OCCU-Find occupations. The analysts used the job information to assess the importance of Verbal Skills (reading, writing, oral communication), Math Skills (computation, data analysis, pattern recognition), and Science and Technical Skills (experimental research, technology, equipment use and maintenance) for the OCCU-Find jobs.

Each occupation in the OCCU-Find includes the relative importance (very important, moderately important, less important) of each composite for successful job performance. This occupational rating system allows students to review the importance of various skill sets for occupations that interest them.

Students compare their skills profiles (i.e., Verbal Skills, Math Skills, and Science and Technical Skills Career Exploration Scores) with the corresponding OCCU-Find skill importance profiles for various occupations. This approach is particularly helpful for students with differing levels of skills in these three areas, and provides a flexible approach to career exploration.

For example, a student can use his or her Math Skills score from the ASVAB test to facilitate career exploration by using the score as feedback about the current level of preparation and skill in mathematics. Suppose a student is interested in a particular occupation that places high importance on mathematics, yet the student has a relatively low Math Skills score. Rather than eliminating this occupation as a potential career choice, a low Math Skills score implies only that the student has yet to gain the appropriate skills for the occupation. Because *Exploring Careers: The ASVAB Career Exploration Guide* provides suggestions to students about how to improve their skills now and over the next few years, students need not abandon potentially interesting and satisfying career choices simply because of low test scores.

Note: These ratings refer to the importance of skills to perform successfully in an occupation and do not reflect the level of skills needed.

Student Satisfaction with Scores

In *Exploring Careers: The ASVAB Career Exploration Guide*, students are encouraged to think about their ASVAB test results as only one measure of their skills and abilities. You might want to describe students' ASVAB test scores as a *snapshot* of their skills in progress. With more education and training, their skills can improve. These scores are only one source of feedback about their skills at one point in time. There are numerous other sources of information about the students, such as their grades. It is important for students to view the test scores as an estimate of their knowledge and achievements at this point in their lives. The scores are not fixed; they are a function of a student's learning opportunities as well as a host of other factors. Students, educators, and communities can do a great deal to help students achieve their fullest potential. If students are not satisfied with their scores on the ASVAB test, you might suggest they ask themselves the following questions:

- ▶ Effort
 - Have I put as much effort into my school work in an area (be it verbal, math, or science and technology) as I can? In other words, have I put in my maximum effort?
- ▶ Academic Preparation
 - To what extent have I taken the relevant classes? Have I avoided the extra math or English classes that would have likely allowed me to increase my scores? *(If students have not taken the necessary courses, now is a good time to take them.)*
 - Has the fact that I have not taken some of the technical classes lowered my scores? Will this impact my readiness for a career?

▶ Environmental Factors

- To what extent has my home or school environment played a role in my performance? Did the climate at home or in school make it difficult to focus on school work? Were there frequent disruptions at home or in class that made it hard for me to concentrate? *(If so, you may want to provide students with guidance on ways to reduce stress.)*

CHALLENGE:

Several students missed the ASVAB interpretation session. What should I do?

Try to schedule time to meet with them, either individually or as a group, even if you only have 10-15 minutes. Focus on their ASVAB test results and make sure that they understand their scores. Then, show them the ASVAB website so they can take the FYI and browse the OCCU-Find occupations and store their searches on their own time.



Once students have asked themselves these sorts of questions, they can begin to seek additional experiences to develop their skills. For example, if a student's Math Skills score is not as high as desired, the student could strive to improve these skills by taking more courses or pursuing tutoring. If the effort of some students has been consistently high, yet there has been little improvement, it may be wise to consider some other choices. For example, if a student is interested in an occupation where Math Skills are very important yet has a low Math Skills score, he or she should first research the specific entry requirements for the occupation of interest. If these appear to be too stringent, the student could explore other, similar occupations that may have fewer math requirements (e.g., engineering technician instead of engineer).

We also offer the following as suggestions:

- ▶ Remind students about the limits of aptitude tests. They are not absolute measures of ability, but rather provide estimates of general levels of developed abilities.
- ▶ Students all too often equate test scores with fixed traits and assume that ability scores do not change. It is important to let students know that education and experience may change their scores.
- ▶ Explain the concept of test error and the presence of error bands in the standard scores graphed on student score reports.
- ▶ Clarify the Career Exploration Scores and the eight ASVAB test scores.
- ▶ Define potentially confusing or misunderstood terms (e.g., standard scores, percentile scores, and norm groups).
- ▶ Remind students that an aptitude test is only one tool used in career exploration. Suggest that they integrate their ASVAB results with other information

about themselves. They should keep in mind formal information (e.g., grades, achievement test scores) and informal information (e.g., teacher reports, paid and non-paid work experiences).

- ▶ Offer personal assistance for those students who want or need it. Arrange to meet with students in small groups or individually to discuss their scores.



Remind students about the limits of aptitude tests. They are not absolute measures of ability, but rather provide estimates of general levels of developed abilities.

ADMINISTERING AND INTERPRETING THE FYI

This section describes the **FYI (Find Your Interests)**, an interest inventory developed for the ASVAB program. The **FYI**, based on John Holland's (1973, 1985, 1997) widely accepted theory of career choice, assesses students' occupational interests in terms of six interest types.

Holland's Theory of Career Choice

Holland's (1973, 1985, 1997) theory of career choice is one of the most widely accepted contemporary theories of vocational choice (Brown & Gore, 1994; Weinrach & Sreballus, 1990). Holland (1973, 1985, 1997) identified six different personality types, and found that most people tend to fall into at least one of these six RIASEC (pronounced REE-uh-sek) types:

- ▶ **R** **Realistic** - Mechanical and Outdoor
- ▶ **I** **Investigative** - Science and Mathematics
- ▶ **A** **Artistic** - Art, Music, and Literature
- ▶ **S** **Social** - Social Service
- ▶ **E** **Enterprising** - Business Contact
- ▶ **C** **Conventional** - Business Detail

Holland arranged the six RIASEC types in a specific order according to the hexagonal model shown in Figure 3-2. In this hexagon, adjacent types (e.g., Realistic and Investigative) are more similar to each other than are intermediate types (e.g., Realistic and Artistic). To read more information about the salient points of Holland's theory, turn to the Appendix. The summary includes a discussion of the six RIASEC types and important aspects of Holland's theory that describe the relationship between the individual and the work environment. We invite you to review the Appendix since it provides a sound basis for understanding the scores provided by the **FYI**. If teachers will be involved in assisting students, you might consider sharing the contents of the Appendix with them, as knowledge of RIASEC types will help them provide students with a richer career exploration experience.



Figure 3-2. The RIASEC hexagon.

Administering the FYI

Students can complete the **FYI** online in about 10 minutes. The paper-based version of the **FYI** will take students approximately 15 to 20 minutes to complete and score on their own, so it can be assigned as homework or done in class, and students can discuss the results. The **FYI** is included as an insert in the back of the *Guide*. Figure 3-3 shows a sample page from the **FYI**.

Alternatively, students can take the **FYI** online at www.asvabprogram.com. The online version is identical to the paper version and will automatically score the students' results. In specific situations, the online version of the **FYI** will provide additional information not included in the paper version. Students will need their Access Code from their ASVAB Summary Results sheet in order to login to the online version of the **FYI**.

You can offer a few instructions to students whether they complete the **FYI** as homework or in class. You might begin by making them aware of the

value of taking an interest inventory to gain an understanding of their current career interests. Honest and accurate answers to the items are critical to obtain meaningful and valid results. For many of the inventory items, students will know their answers almost immediately. For other items, however, they may not be so certain. On these items, students should probably base their answers on their first impression. If, however, students do not understand an item or what is being referred to in an item, they should be encouraged to ask for clarification.

Remind students that they are providing information about their likes and dislikes and not their skill level.

The image shows a sample page from the FYI (Future Years Interest Inventory) with 30 numbered items. Each item has three radio button options: L (Like), I (Indifferent), and D (Dislike). The instructions at the top are: 'Select L for Like (I would like to do this activity.)', 'Select I for Indifferent (I don't care one way or the other.)', and 'Select D for Dislike (I would not like to do this activity.)'. The page number 'Page 1 of 3' is in the top right corner. A 'Next' button is in the bottom right corner.

Select L for Like (I would like to do this activity.)	Select I for Indifferent (I don't care one way or the other.)	Select D for Dislike (I would not like to do this activity.)
1. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Attend an art class	11. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Enter data in an accounting ledger	21. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Explore ancient ruins
2. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Help children with after-school homework	12. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Persuade committee members on an issue	22. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Operate a farm
3. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Investigate stars and black holes	13. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Write a movie script	23. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Do accounting for a business
4. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Adjust bicycle gears	14. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Help people cope with loss	24. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Manage a department in a company
5. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Count and balance a cash drawer	15. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Test DNA samples	25. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Illustrate a book
6. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Chair a committee meeting	16. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Install kitchen cupboards	26. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Assist a teacher in the classroom
7. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Act on stage	17. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Count the inventory of a small business	27. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Study an active volcano
8. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Serve as a playground activity leader	18. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Campaign for a political office	28. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Apply wood stains and varnishes to furniture
9. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Discover a new strain of virus	19. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Compose music	29. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Process company payrolls
10. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Repair a leaky faucet	20. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Volunteer for a local community service	30. <input type="radio"/> L <input type="radio"/> I <input type="radio"/> D Conduct a business seminar

Figure 3-3. Sample FYI items.



In addition, you should remind students that interest inventories are not like other tests. There are no right or wrong answers. In addition, they are not choosing occupations. Ask them instead to consider whether they would like, dislike, or are indifferent to doing a given activity. They should not be concerned with how well they would do any activity or whether they have the experience or training to do it.

Scoring the FYI

Students who take the **FYI** online will simply follow the on-screen instructions to complete the **FYI**, and their scores will automatically be calculated. Students using the paper version of the **FYI** will need to follow the scoring instructions printed on each copy. As shown in Figure 3-3, students answer the **FYI** questions by indicating their response [*Like (L)*, *Indifferent (I)*, or *Dislike (D)*]. Each response has a corresponding point value:

***Like (L)* = 2 points**

***Indifferent (I)* = 1 point**

***Dislike (D)* = 0 points**

Students will not be able to see the point values while they take the **FYI**. The reason for this is to reduce the potential for confusion or response bias. For example, some students may answer items in such a way to increase their numeric score, using the erroneous assumption that a higher score is better. Once students finish answering the inventory questions (print version), they should turn the page to see the point values as shown in Figure 3-4 on page 30.

Students can then begin to add up their scores. They will add the circled numbers in each row (going across) and write the total in the highlighted box at the end of the row. They will need to follow the color bands and rewrite the total in the box directly to the right.

STEP 2 Add the circled numbers in each row (going across) and write the total in the highlighted box at the end of the row. For example, add your numbers for questions #1, #21, and #61; then write the result in the highlighted box in the orange column.

STEP 3 Follow the color band and insert the number in the box directly to the right. Add all of the numbers in each column (going down) and write the total in the highlighted box at the bottom of each column. These are your Raw Scores.

STEP 4 Do the following on the following page.

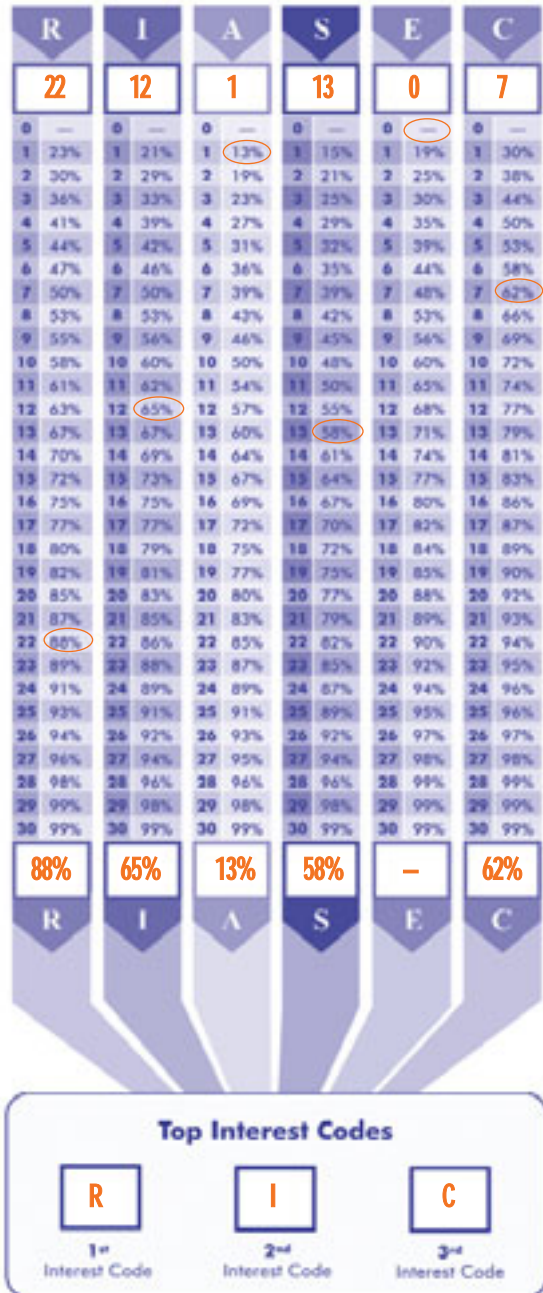
Your Raw Scores • R 22 I 12 A 7 S 13 E 0 C 7

Figure 3-4. FYI point values and score sheet.

Students should add all of the numbers in each column (going down) and write the total in the highlighted box at the bottom of each column. These numbers are the students' raw scores.

Once students have determined their raw scores for each interest area, they should turn the page and determine their percentile scores, which indicate the percentage of students that scored at or below the raw score. Students do this by locating their raw scores and circling the corresponding percentile scores (see Figure 3-5).

The last step in scoring the FYI is determining the three Top Interest Codes corresponding to the three highest percentile scores. These codes (R, I, A, S, E, C) are to be written in the appropriate spaces according to which code is associated with the highest score, the second highest, and the third highest. If there is a tie, and two (or three) codes have the same percentile score, students should enter both (or all three) codes in the same box. No more than three RIASEC codes are entered into any one box.



While great care was taken to create scales that would facilitate accurate self-scoring, some students will make scoring errors. Such errors can seriously affect the accuracy of the results. If students want to, they can exchange their FYI with a partner and have each partner check the other's scoring.

Considering Gender-Based Results

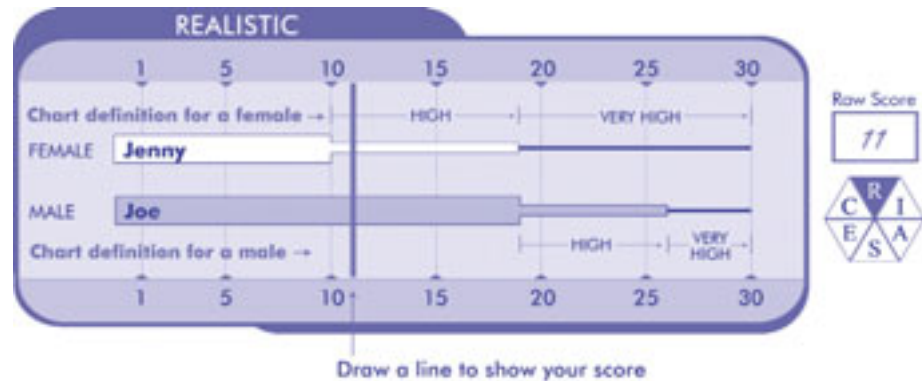
Before students use their top three Interest Codes from the FYI for career exploration, they should be encouraged to see how their scores compare to others in their gender group.

Exploring Careers: The ASVAB Career Exploration Guide provides students with *Gender-Descriptive Graphs* (pp. 12-13 of the *Guide*) that show the distribution of scores, for both males and females, for Realistic, Artistic, and Social interest areas. These graphs indicate scores for each gender that are considered High or Very High. Students are instructed to draw a line on each graph representing their raw scores for the three interest areas (see example below). If their scores are considered High or Very High for their gender for one or more of the Interest Codes, students are encouraged to consider exploring occupations in those areas.

No other career exploration program allows students to explore occupations by interest while taking into account gender-based influence. Want to learn more? Watch the Understanding your Gender-Specific Scores tutorial at www.asvabprogram.com.

Figure 3-5. Determining the three Top Interest Codes

Figure 3-6. Gender-descriptive graph comparing Joe and Jenny.



In the online version of the **FYI**, students receive gender-based percentile scores for all six RIASEC types. They are encouraged to compare these with their combined percentiles to see the impact of gender on their scores.

Figure 3-6 shows an example of how gender can influence scores. In the example, both Joe and Jenny have a raw score of 11 on Realistic. Each of these students would place a line at 11 as shown on the graph to show their score. Joe's score is not exceptionally high when compared to other males, but Jenny's score falls in the High range when compared with females. Since Jenny's score falls in

the High range, she may want to explore occupations that involve Realistic interests in addition to exploring her Top Interest Codes.

It is important that students complete this exercise because they may discover new ideas about their interests. You can provide students with information on gender role socialization that is easily understood and informative. For example, you want to remind them that when growing up, males and females get different messages from their parents, schools, and the media about what careers are appropriate for them. Teenagers sometimes develop different skills because they have different experiences, and these factors

CHALLENGE:

My students aren't interested in their gender-based **FYI** scores. Why should students learn about the influence of gender on their scores?

*Students may decide not to use their gender-based **FYI** scores, but it is important for you to go over these scores with them so that they understand how cultural messages may have affected their interest profiles. Providing them*

with this information offers them additional avenues for career exploration and opens up career fields that they might not have considered before.

may influence their choices and interests. Females tend to have fewer opportunities to participate in activities, such as using machines and working outdoors, that define the Realistic type. Similarly, males tend to have fewer opportunities to do activities that define the Social and Artistic types.

In short, the *Gender-Descriptive Graphs* are useful because they can indicate that a student has especially strong interests in one area. For example, a female who scores 27 in Realistic on the **FYI** would have a corresponding Very High score in Realistic on the *Gender-Descriptive Graph*. Such a result would indicate that Realistic is a very strong Interest Code for her.

Encourage students to read descriptions of each Interest Code on pages 6-11 of the *Guide* to help them learn more about the six RIASEC types and see which types most closely match their interest area.

Helping Students Understand Their FYI Results

The **FYI** is well adapted to interpretation individually or in groups. Holland's RIASEC typology organizes occupations in the world of work so students can focus their attention on potentially satisfying occupations. In talking about their RIASEC types, students learn a new way of conceptualizing and talking about their interests. More complex and useful self-conceptualizations may emerge through a discussion of their results.

The overwhelming majority of students will have Top Interest Codes that are easily interpretable. Figure 3-7 provides an example of a typical profile for a male student, Mike.

By converting his raw scores to percentile scores, Mike can determine that his Top Interest Codes are RIS. Therefore, he should start exploring careers first in the Realistic arena.

It would also be important for Mike to look at his gender-based scores. When compared to other males, the order of his top three codes changes. His gender-based percentile scores are as follows: R is 82%, I is 66%, and S is 79%. His Top Interest Codes become RSI. Mike is showing strong Social interests when compared to other males and should be encouraged to explore occupations in this area.

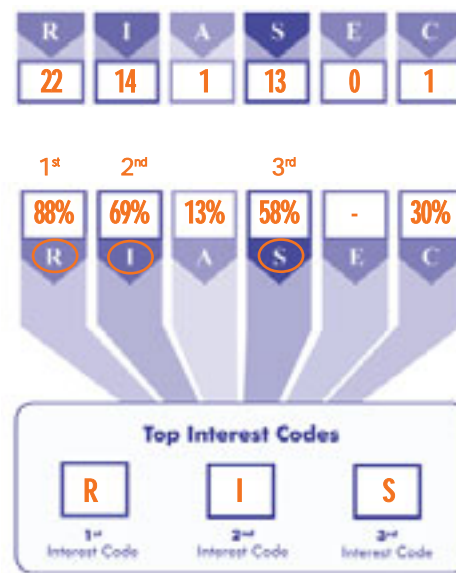


Figure 3-7. Determining Top Interest Codes for a typical male student (Mike).

Still have questions? Watch the FYI results tutorial at www.asvabprogram.com

Dealing with Ties

It is not uncommon to have ties for any of the Interest Codes. Figure 3-8 illustrates a 3-way tie for the primary Interest Code.

Juanita has three tied percentile scores. Her profile shows a spread in the remaining scores. For purposes of career exploration, Juanita should be encouraged to consider all components of the Interest Codes. Capitalizing on Juanita's Investigative type, you might suggest that she review occupations listed in the *Guide* for each of these primary types (I, A, and S) and identify one or two occupations to explore for each type with secondary codes consistent with the other two types. As she researches the types of tasks performed and the environments where the work is typically performed, Juanita may identify differences that are important to her. Some students may not have three distinct Interest Codes that are higher than the remaining Codes (e.g., a tie between the third and fourth highest score). In these cases, students should be instructed to review code descriptions and select the ones that seem most interesting. The online version of the FYI automatically directs students to choose between these tied scores. Figure 3-9 displays one of the screens that might appear in this instance.

Helping Students with Undifferentiated Profiles

The ability of an interest inventory such as the FYI to identify a person's interest type is predicated on a response pattern of *Like*, *Indifferent*, or *Dislike* responses to the items. An undifferentiated or flat profile based on their percentile scores can occur at any level on the scale. This occurs when the person answers the items in each scale with a pattern of *Like*, *Indifferent*, or *Dislike* responses that yield relatively equal scores.

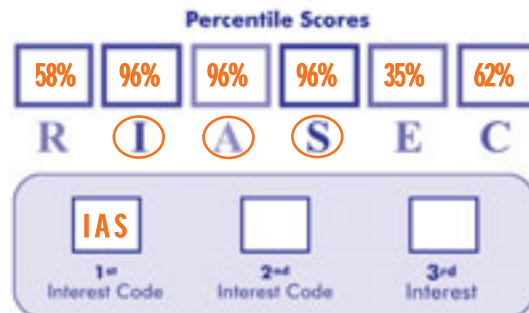


Figure 3-8. Tied percentile scores for a female (Juanita).



Figure 3-9. Online example of tied FYI scores.

With a flat, undifferentiated profile, the differences among the raw scores are considered minor fluctuations or measurement error. In such a case it is not appropriate to draw any conclusions from such minor differences.

Flat, high profiles or flat profiles that are neither low nor high can occur for several reasons, including:

- ▶ a consistent tendency to say “Yes” to questions, regardless of the questions
- ▶ a belief that one should be interested in everything
- ▶ a lack of understanding of the cognitive task
- ▶ not engaging in the task
- ▶ a reflection of the person’s interests in all or most of the interest types.

If a student has an extremely undifferentiated profile he or she has an invalid score and must re-take the **FYI**. The online version of the **FYI** defines an invalid score as one where 90% (81) of his/her responses are all of one type (e.g. all *Like*, *Indifferent*, or *Dislike*). If you are working with students who have such a profile, you could explain that their responses did not show a sufficient pattern of likes and dislikes for determining their top three Interest Codes.

You should encourage students to vary their responses and remind them that they are not choosing an occupation when they take the **FYI**. Rather, they are selecting activities that they either like, dislike, or are indifferent to doing. Thinking about hobbies that they enjoy might help them relate better to the items in the **FYI**, too. The online version automatically provides this guidance to students who have invalid scores (see Figure 3-10).

Your responses did not show a sufficient pattern of likes and dislikes for us to score your responses and provide you with your three Top Interest Codes.

Try retaking the inventory and using more varied responses.

- If you used a lot of *Likes*, try being more selective.
- If you used a lot of *Dislikes*, try being less selective.
- If you used a lot of *Indifferents*, move off the fence!

Tips for retaking the FYI:

- Read each interest item carefully before responding.
- Make sure that your responses accurately reflect your interests.
- Think about hobbies that you enjoy and relate them to the items in the FYI.
- Keep in mind that you are not selecting an occupation. You are selecting activities that you either like, dislike, or are indifferent to doing.




Figure 3-10. Online undifferentiated score example.

In some cases, students may still have an undifferentiated profile after retaking the **FYI**. These students can still explore occupations, but will likely need extra guidance. You might suggest that they review the six scale definitions and the list of occupations in the *Guide* to identify one or two occupations for each type. For those occupations, have them read the Nature of the Work and Working Conditions sections in the *Occupational Outlook Handbook* or the What They Do and Work Environment sections in the occupational descriptions found at www.careersinthemilitary.com. This information may provide insights about the differences in the RIASEC types represented by the selected occupations. In turn, this information may help the students focus on two or three preferred interest types.

One way to assist students with undifferentiated profiles is to direct them to consider their interests in relation to others of the same gender. When looking at the gender-based percentiles, the number of undifferentiated interest types may decrease.

Helping Students with Undifferentiated Low Profiles

Assisting students with flat or undifferentiated, low profiles is somewhat more difficult since the students have indicated they dislike the overwhelming majority of items. In some cases, such an undifferentiated, low profile can occur for the following reasons:

- ▶ a consistent tendency to answer with a “No” response, regardless of the questions
- ▶ not having thought about such things
- ▶ exercising a very high degree of discrimination and wanting to select only the most desirable
- ▶ a lack of work-related experience



- ▶ an underlying mood state
- ▶ not engaging in the task or understanding the activities

As with the high, flat, or undifferentiated profiles, you might begin by asking the student why he or she thinks the particular pattern emerged. Is the low profile really reflective of the student’s interests? If the flat profile was the result of a lack of prior thinking about or experience with the world of work, you might suggest that the student gain some experience via hobbies, paid and non-paid work, classes, or other activities.

Low, Undifferentiated Profiles and Mood States

A flat, undifferentiated profile may, in some cases, be indicative of an underlying mood state. Your knowledge of the student is important in determining whether the **FYI** results are a result of such a mood state.

DISCUSSING WORK VALUES WITH CAREER EXPLORATION

The purpose of this section is to introduce students to various work-related values and to discuss the central role work values play in job satisfaction and informed career planning. In the discussion, we make the following points:

- ▶ A person is likely to be happier working in an occupation that supports his or her values.
- ▶ In exploring various occupations and planning, it is important for a person to understand what he or she values.
- ▶ Research has shown that values are predictive of job satisfaction. Two components of job satisfaction are intrinsic satisfaction (satisfaction with the work itself) and extrinsic satisfaction (satisfaction with the conditions at work, such as physical setting and earning potential).
- ▶ When values are not taken into consideration in career planning, there is a greater chance that a person may find work less satisfying and therefore not succeed in it.
- ▶ An individual's work values may change during different stages in his or her life. For example, the desire for work involving lots of travel might change after marriage and having a family.

Table 3-4. Work-Related Values

Value	Description
Challenge	Learning new skills or information; self-development
Creativity	Doing things in a new way, inventing things, or developing different approaches or methods
Making or Fixing Things	Using your hands and/or tools to make or fix objects; working with things that you can see and touch
Helping Others	Doing things for others; building a better world
Income	Making a high salary
Independence	Being able to determine the nature of work without significant direction or instructions from others; deciding how and when to do your work
Public Contact	Providing information to the public; talking to people outside your organization
Security	Having stable employment, steady income; not worrying about being laid off
Variety	Doing many different activities; not doing the same things all the time
Working in a Group	Working with others, being cooperative; getting to know co-workers
Physical Activity	Doing work that requires physical activity, such as walking, lifting, and carrying or moving heavy objects
Prestige	Doing work that is seen as important, and for which people admire and respect you

- ▶ A change in life circumstances can precipitate a shift in the importance of different values, such as having a flexible work schedule.
- ▶ Some values are associated with a specific job and are determined by the employer or the location of the job.

You might want to undertake two tasks as you discuss work values: (a) establishing that work values play a role in job satisfaction, and (b) helping students begin to identify values that may be important to them. For the latter, you might start by asking students if they have ever quit a job and follow that question up with why they quit. Often, the reasons for quitting a job are related to work values. (For example, “I had to work by myself all the time.” or, “My boss was too controlling in how I did my work.”)

To facilitate students’ understanding of work values, consider a discussion of the listed work values in Table 3-4 and any that might not appear on the list. Have students think of specific jobs that illustrate these values. You could list other work-related values that might be location-specific (e.g., commute time, rotating shifts). Encourage students to read the section on work values in *Exploring Careers: The ASVAB Career Exploration Guide and Learn About Yourself* section of www.asvabprogram.com.

It is important for students to consider the role that work values play in the career exploration process and in their career development. My ASVAB Portfolio provides an area for students to catalogue their work values and compare them to the occupations they’re exploring. However, the concept of work values and the important role they play will more than likely be a new concept for most students. Developmentally, it is appropriate for students to begin thinking about important work values even though a formal assessment may not be useful at this stage of their lives.

USING THE OCCU-FIND

In talking to students about career exploration and planning, consider using the metaphor of embarking on a lifelong journey into unknown lands. Students’ results from the **FYI** and the ASVAB test represent a source of direction for the journey. How can students use their Interest Codes and Career Exploration Scores to find their way? We believe the answer is in developing skills in exploration and planning. Students begin the journey by using the OCCU-Find, but they need to know that this is not a narrowing-down process that will result in finding the right match. Rather, their scores should empower them

OCCU-Find Social Occupations

Directions: In the Explore Further column on the left, check the occupation(s) that interest you.

Key: Importance of Skills: ✓✓✓ = Highly Important ✓✓ = Moderately Important ✓ = Less Important

Explore Further	Occupational Titles	2nd Interest Code	Skill Importance Ratings		
			Verbal	Math	Science/Tech.
[]	Adult Literacy, Remedial Education, and GED Teachers and Instructors	A	✓✓✓	✓✓	✓
[]	Arbitrators, Mediators, and Conciliators	E	✓✓✓	✓✓	✓
[]	Athletic Trainers	R	✓✓✓	✓✓	✓✓✓

Figure 3-11. Sample of the printed OCCU-Find as found in *Exploring Careers: The ASVAB Career Exploration Guide*.

to explore and try things out in more depth. Exposure and experience are priceless. We want students to fully explore their options to find the best directions for their life journeys.

We selected occupations from the Occupational Information Network (O*NET) database for the OCCU-Find. These occupations are organized according to RIASEC types. For five of the six RIASEC types, approximately 60 occupations were selected to provide students with a representative yet manageable set of occupations to explore. However, in the world of work, there are proportionately more Realistic occupations; of the 1,018 occupations in the O*NET database, over 500 are Realistic occupations. To adequately represent Realistic occupations, we included a higher proportion of Realistic occupations in the OCCU-Find. Figure 3-11 shows a graphic of the printed OCCU-Find as found in *Exploring Careers: The ASVAB Career Exploration Guide*. Figure 3-12 shows an online example of the OCCU-Find that can be found at www.asvabprogram.com.

The OCCU-Find also provides students with the occupation's second RIASEC type (and types tied for second). Having information about the second interest code allows students to identify occupations with environments that are potentially more satisfying to them. In the next three columns, Skill Importance Ratings are shown for Verbal Skills, Math Skills, and Science and Technical Skills. The Skill Importance Ratings show if the skill set is less important, moderately important, or very important to the job in question. The Skill Importance Ratings, derived from the O*NET database, are based on analyst ratings of the importance of these knowledge, skills, and abilities (KSAs) to the successful performance of the job tasks. It is important to note that the ratings refer to the *importance* of the skill set, not the *level* of a



Figure 3-12. Online example of the Occu-Find

given skill that is required. For example, Math Skills are rated very important for the occupation Market Research Analysts; however, this does not mean that an individual must have an advanced degree in mathematics to qualify for the occupation.

Explaining Skill Importance Ratings

What is the relationship between the Skill Importance Ratings in the OCCU-Find and students' Career Exploration Scores?

As stated before, students' scores on the three Career Exploration Scores should be viewed as *current snapshots* of their KSAs. The three Skill Importance Ratings provide a *current snapshot* of the KSAs required to successfully perform the tasks for the given occupation. The phrase *current snapshot* is applied to both because both are subject to change.

Further education and experience may have a positive effect on students' KSAs. The world of work is also changing. Of course, some jobs will not change all that much, but with the rapid influx of technology coupled with huge shifts in the nature of work, it is nearly impossible to predict how occupations will evolve. So we use the terms *current snapshots* to describe these scores and ratings.

The three ASVAB Career Exploration Scores and the O*NET-based Skill Importance Ratings are comparable; however they are not numerically similar. For the majority of the occupations in the OCCU-Find, it is not appropriate to make a one-to-one comparison between the two. Consider the substantial amount of training or education required before a person, particularly a 10th or 11th grade student, would be qualified to apply for most of the occupations in the OCCU-Find. Additional high school courses and courses in a training program or postsecondary education program would take years—several years in some cases—and further education and training would likely result in an increase in the person's

Verbal Skills, Math Skills, and Science and Technical Skills. Prediction of performance in the distant future is not likely to be fruitful because of the many ways the students and occupations will change over time.

So what value do the Career Exploration Scores have for high school students? Skill Importance Ratings provide students with a general idea of how important these skills are for a given occupation, which is useful information for students to have. Students should be encouraged to compare their Career Exploration Scores to the Skill Importance Ratings for occupations they are interested in exploring. This *snapshot* of the skills needed gives them valuable information to make judgments and decisions. As they ponder their current skill levels and the importance of these same skills for job incumbents in the occupations they are interested in, they should research the actual requirements for the occupation. For example, if Verbal Skills are very important for an occupation of interest, the student should research what specific skills and/or training are required. Students should also be encouraged to ask themselves such questions as:

- ▶ What sort of education or training will I need to be able to work in this occupation?
- ▶ Will my current skills and abilities allow me to get into the relevant training or education program?
- ▶ Does my past performance in classes and my current level of skills (as evidenced by my ASVAB results, grades, and other test results) suggest that I will be successful in the training and education required for this occupation?
- ▶ Is my interest and motivation for working in this occupation sufficient to carry me through the training and education I will need to prepare for this occupation?
- ▶ Should I be taking more classes or engaging in some other activities (while in high school) to increase my skills in one or more areas?



Ultimately, when a student evaluates his or her Career Exploration Scores and **FYI** results along with the information provided in the OCCU-Find, the student should question “Am I heading in the right direction?” After he or she has explored and investigated different occupations, it is appropriate to make a more in-depth assessment to determine what must be done to develop the skills necessary to take the next step. For 10th and 11th grade students, this involves making sure they are in the appropriate programs of study and selecting the most relevant courses to enhance their skills while still in high school.

One important message that we hope students will come to understand is that they can potentially make changes in their KSAs. We tell students this in the *Guide* and we use the phrase *current snapshot* when referring to their Career Exploration Scores to emphasize this point. These scores should not be used to rule out any occupation at this time. In our view, the best way of learning about the extent to which students will match well with a given occupation is through exploration. We want to help empower students to overcome obstacles and obtain the education necessary for their career choices.

An important message to students is that they can potentially improve their KSAs. The Career Exploration Scores provide only a current snapshot of their verbal, math, and science/technical skills.



Explaining Education Requirements

The OCCU-Find does not have information about educational requirements associated with the occupations. This was done intentionally for several reasons, but primarily because education is a lifelong process. Today, there are more educational opportunities and alternatives available. Not all students will or should go on to a four-year university. Two-year degree programs and certificate programs enable students to enter some of the fastest growing occupations. The proliferation of technical occupations coupled with the different career and educational choices have dramatically altered this landscape. By not providing the education requirements “up front” we hope to expand students’ exploration and planning. We also hope they will make informed choices about their educational and career paths.

Another reason is that high school students’ goals and plans are almost constantly subject to review and revision. For close to forty years, longitudinal studies conducted by the U.S. Department of Education [e.g., the National Educational Longitudinal Study (NELS), High School and Beyond (HSB)] have shown that many students do not carry out their high school plans. These studies, for example, suggest that more than one out of every three high school students who say they will go to college do not attend college.

Of those who do attend college, only about half complete a four-year degree program. Limiting career exploration primarily or exclusively on students' current postsecondary plans could do these students a disservice. Students should be encouraged to explore all occupations that interest them no matter what their current postsecondary plans are.

Highlighting Career Resource Information

To help students learn more about careers they're interested in, the ASVAB CEP offers students access to a number of career resources. In the online OCCU-Find each occupation is linked to the Occupational Outlook Handbook, O*NET Online, and www.careersinthemilitary.com (where applicable). The OCCU-Find also links occupations directly to Career Clusters and Bureau of Labor Statistics career videos.

We encourage students to learn as much as possible about their potential career choices and to talk with parents and other family members, teachers, and you about taking the next steps. To familiarize parents and teachers with the ASVAB Program and suggest how they might provide assistance and encouragement to students in this process, we have prepared Fact Sheets and posted them on our website, www.asvabprogram.com.

In addition to the OCCU-Find in the *Guide*, students can explore occupations electronically at www.asvabprogram.com. The online version of the OCCU-Find includes close to half of the occupations in O*NET. Students can explore occupations in RIASEC

order or in alphabetical order. In the electronic version of the OCCU-Find, we have also included links to the occupational descriptions from the *Occupational Outlook Handbook*, O*NET Online, (U.S. Department of Labor, 2002), www.careersinthemilitary.com, and Career Clusters.

Maximizing Students' Exploration

Exploration is a way of life, a way of being open to the world. Encourage your students to engage in as much exploration as possible to learn more about themselves and about the world of work. To help them learn more about themselves, consider giving students the following tips on exploration:

- ▶ **Search for information that challenges as well as supports your current goals.** We all want to have our plans affirmed by life experience and others; however, sometimes this is not always in our best interest. It is useful for students to examine aspects of an occupation or training option that may not be particularly attractive to ensure that they will be comfortable with the entire set of circumstances of a given career.
- ▶ **Seek out multiple sources of information.** Most decisions are best made with multiple sources of information. Having students engage in exploration, such as reading materials about occupations, shadowing people in specific jobs, and taking courses in new areas, can provide them with a great deal of information from various sources. When the students begin to notice consistent patterns of feedback, they will

be in a better position to make informed decisions about their futures.

- ▶ **Develop some tentative plans while also keeping your eyes and ears open to new opportunities, changes in a given field, and changes within yourselves.** Being in a state of open-ended exploration without making final decisions can be very stressful and uncomfortable. You are well aware of the tendency for students to make decisions in high school so that they do not have to deal with the uncertainty of not knowing their future path. Exploration can yield a number of interrelated options for training and work that may help to give students a sense of planning and being open to new experiences.
- ▶ **Connect self-exploration with exploration of educational and career options.** When students learn new information about an occupation, help them to connect it to their own sense of who they are and where they want to go. The sense of evaluating information in light of one's sense of self is very important in maximizing the outcomes of exploration.

Student Scenarios: Juan and Jennifer

At this point, it may be helpful to review two cases of high school students, found on the following two pages, to consider how they used their scores and how the process of understanding their results helped to generate their own exploration process.



Juan

Juan is a 16-year-old student at a metropolitan high school on the West Coast in a medium-sized city. He took the ASVAB test toward the end of 10th grade along with the rest of his school, without giving it much thought. He was rather bored by the tests and was glad to get them over with. His scores, which placed him between the 30th and 60th percentiles, were actually a bit of a disappointment to him. He always felt that he was smart, but attributed his low grades to lack of effort. Juan was mostly concerned about his friends, dating, and sports. He did not think much about what he would do with his life after school; college, work, or military life did not appeal to him. He just thought that he would figure something out as he went along in life.

Although Juan was upset with his ASVAB test scores, he found his **FYI** results intriguing. The results indicated that he enjoyed working in technological areas and that he was rather "enterprising" in his nature. This made sense to Juan because he loved to work with the computer and he had recently saved up some money to buy himself a laptop. In addition, he was typically the leader in various sports teams and his friends looked up to him for advice. Then Juan compared his scores with the various fields that he thought he would like to consider further. He became upset because, initially, he found that his ASVAB scores suggested that he would not necessarily excel in these areas. The matches that he had hoped for were not very encouraging.

Exploring the OCCU-Find and his ASVAB scores did not convey a particularly promising future. However, his counselor reminded him that the ASVAB scores were relevant only for short-term decisions and that as a sophomore there were many ways he could "improve" in those areas that bothered him. His counselor further explained to him that he should not consider these scores as a sort of crystal ball that could see into his future. He actually could change how he fared in tests like these by putting forth more effort in school and by exploring his options further. The ASVAB process also allowed Juan to consider his work values in a more systematic way. Juan spent some time at www.asvabprogram.com and read the section on values. Juan was able to articulate that he valued challenge, income, prestige, public contact, independence, and security in his work life.

Juan decided to enter a Career Cluster Pathway in his school that focused on technology and business. He started to take courses that seemed more relevant to him and was also involved in job shadowing, spending time with a computer analyst at a local company in his community. In addition, he started to receive some tutoring in his weakest subject—math. By the time he reached his senior year, he was interested in college and was performing quite well in school. He was able to improve his grades enough to obtain admission to the state university, where he enrolled as a student in Business Administration with a minor in Computer Science.

Jennifer

Jennifer took the ASVAB test in the first part of the 11th grade when she had just turned 17. Jennifer did not have much interest in school at that point in her life. In fact, she was basically turned off by the entire high school experience. Her parents had recently separated and she was feeling that she could not afford to go to college. In addition, she did not have a lot of confidence in herself in most areas of her life, except in the area of writing, where she was privately working on song lyrics and poems. Jennifer did not like to think about the future as she did not think that she could really do anything well enough. Moreover, she did not have any specific interests in school or in extracurricular activities. Like Juan, Jennifer valued challenge, creativity, income, prestige, and variety.

Jennifer took the **FYI** online, but her results were not all that informative. Her guidance counselor called them a "flat profile," which meant that the results did not necessarily point to a particular pattern of interests. However, Jennifer's ASVAB scores were much higher than she had expected. Her counselor was a bit surprised by the fact that her scores ranged across the 80th and 90th percentiles, even in math, which had been her least favorite subject. While this part of the testing process was certainly encouraging, her "flat profile" was distressing. What did it mean to have a flat profile? Did that mean that she would never become interested in anything?

Her school counselor was very helpful at this point. Together with a number of other students

who also had "flat profiles," Jennifer joined a career exploration group in the Guidance Office. The purpose of this group was to explore oneself and one's options in depth, with the support of one of the guidance staff. Jennifer enjoyed this a great deal as she was able to talk more openly about her writing. She learned how to explore colleges and occupations on the Internet, and she also received some useful ideas from the rest of the group. Most of all, talking with other students helped her think about her own interests more. Consequently, she became more involved in those classes that aligned with her creative interests.

One of the most interesting aspects of the ASVAB Program for Jennifer was learning more about military careers. Jennifer never really considered the military before taking the ASVAB. However, her self-exploration and growing knowledge about military careers which she gained at www.careersinthemilitary.com, she was now able to put some pieces together. Her ASVAB scores suggested that she might do well in officer candidate training at some point in her life. In addition, she learned that she could receive some funding from the military to attend college after she completed her service. Furthermore, she was beginning to sketch out a life plan that included creative writing along with writing in other contexts. She learned that she could apply her verbal ability in a variety of areas and still maintain some time for her creative pursuits. Once she finished high school, Jennifer enlisted in the U.S. Navy where she received training in public relations.



What are the key ingredients in these cases that seemed to make a difference?

- ▶ **Exploration:** For both Juan and Jennifer, the ASVAB process resulted in exploration that had both short-term and long-term aspects. They embarked on a process of self-discovery that helped them re-examine and challenge some of their existing beliefs and also helped them chart some new directions in their lives.
- ▶ **Trying things out further:** Another important aspect of Juan's and Jennifer's stories was their determination to try out experiences further, which actually represents a form of exploration. Rather than viewing the matching process in the OCCU-Find as a onetime event that determines the rest of their lives, Juan and Jennifer learned that the purpose of the ASVAB program is to promote exploration and not to determine final career choices. Once they got this message, they started to test out some of the assumptions and conclusions of the FYI and ASVAB with real-life experience. As we have witnessed in these stories, both Juan and Jennifer were able to chart new pathways based on their exploration.

INCORPORATING IN-CLASS ACTIVITIES

We have developed supplemental student materials—*My Educational and Career Plans*, *Coursework Planner*, and *Idea Sheets*—to help students organize career-related information and plan the next steps for realizing their career choices. These tools will also help students make the connection between their current academic classes and preparation for their future careers. Establishing this connection will encourage them to take responsibility for not only planning their careers, but also for planning the rest of their high school classes. Understanding this connection may increase their desire to learn or acquire the KSAs offered in their current classes.

If necessary, students can complete these materials on their own; however, when integrated into an academic class or a series of career education classes, more students will reap the benefits.

Both the *Coursework Planner* and *My Educational and Career Plans* are available online at www.asvabprogram.com to download and complete.

My Educational and Career Plans

My Educational and Career Plans consists of four activities designed to encourage students to think about and describe career exploration efforts. Students are asked to think closely about their work interests. They jot down types of jobs they've liked or disliked in the past, which work values they have, and what activities they like most. They're also

asked to list occupations that they're considering as well as post-high school plans. Taken together, these activities give students a broad view of their personal and work interests.

Coursework Planner

To complete the *Coursework Planner*, students will need to have a list of graduation requirements for their current programs of study. As part of these exercises, they are asked to identify one or two post-high school goals. These can be immediate civilian or military employment, a 2-year or 4-year program of study, or a vocational training program. As they engage in exploration of these post-high school goals, they are asked to identify high school courses that are considered necessary for admission to a program of study or entry into a civilian or military occupation. In the final step, students are asked to evaluate their current academic preparation in terms of their tentative goals and to develop an educational plan (i.e., selection of high school courses) that facilitates goal accomplishment.

Your review (or a teacher's review) of these plans would help to identify potential problems (e.g., when the students' plans are not realistic or when their interests and abilities do not complement one another).

Encourage students to work together with partners or in small groups to complete the exercises. The sharing and support this provides for the students can be very beneficial. Extend an invitation to review and discuss their results on either a one-to-one basis or in small groups.

Idea Sheets

The Idea Sheets can be incorporated into curriculum in such classes as English, computer science, communication, etc. These Idea Sheets encourage students to research occupations, interview job incumbents, and complete *My Educational and Career Plans*. For example, the sheet entitled *Linking Core Subjects to Career Exploration* directs students to explore the connection between the skills that are learned in core classes (English, science, and math) and the world of work.


CHALLENGE:

I would like to get faculty more involved in the ASVAB Program, but don't know where to start?

Show teachers *My Educational and Career Plans*, *Coursework Planner*, and the *Idea Sheets* found at www.asvabprogram.com. These activities let students see how their

studies (in English, math, and computer science, for example) can relate to career fields. They are also useful research exercises that encourage data gathering and analysis.

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Appendix



HOLLAND'S THEORY OF CAREER CHOICE

According to Holland (1973, 1985a, 1997), there are basically six different personality types, and most people tend to fall into at least one of these six RIASEC (pronounced REE-uh-sek) types:

- R** Realistic - Mechanical and Outdoor
- I** Investigative - Science and Mathematics
- A** Artistic - Art, Music, and Literature
- S** Social - Social Service
- E** Enterprising - Business Contact
- C** Conventional - Business Detail

For convenience, we refer to a person with strong mechanical and outdoor interests as a Realistic person. Work environments can be thought of in a similar fashion. Each work environment can be categorized according to its RIASEC type. These types are simply ways of describing and categorizing people and work environments based on certain characteristics.

While people and environments possess at least some characteristics from all six of the RIASEC types, most people and work environments can be categorized according to their highest one, two, or three RIASEC types. There tends to be a strong relationship between the personality and the work environment types. According to Holland, work environments are typically populated by people with the corresponding personality type. For example, Realistic work environments tend to be populated by Realistic people.

The Hexagon

Holland has arranged the six RIASEC types in a specific order according to the hexagonal model shown in below. In this hexagon, adjacent types (e.g., Realistic and Investigative) are more similar to each other than are intermediate types (e.g., Realistic and Artistic).



Realistic people are often interested in mechanical activities. They frequently prefer activities that allow them to use their hands, let them see the results of their work, allow them to work alone rather than with others, and use machines, tools and equipment. Some examples of Realistic occupations include Aircraft Pilot, Automotive Mechanic, Broadcast Technician, Woodworker, Firefighter, and Radar Operator.



Investigative people are often interested in mathematical or scientific activities. They typically prefer activities that involve learning about new subjects or allow them to use their knowledge to solve problems or create new things and ideas. Some examples of Investigative occupations include Detective, Dietitian, Nutritionist, Meteorologist, Reporter, Payroll Clerk, Physical Therapist, Psychologist, and Veterinarian.



Artistic people like activities that allow them to express themselves through some type of artistic medium. They typically like activities that allow them to be creative, to use their imagination to do something original, and to work according to their own rules. Some examples of Artistic occupations include Actor or Actress, Graphic Designer, Jeweler, Musician, Photographer, and Writer.



Social people often prefer activities that allow them to interact with others. They frequently like activities that involve working with and helping others, and that involve teaching. Some examples of typical Social occupations include Counselor, Licensed Practical Nurse, Physical Therapy Assistant, Flight Attendant, Recreation Worker, and Teacher.



Enterprising people tend to prefer activities that allow them to influence others. They frequently like activities that are fast-paced and require them to take on a lot of responsibility or leadership roles. Some typical Enterprising occupations include Executive, Judge, Real Estate Agent, Retail Buyer, Sales Representative, and Travel Agent.



Conventional people often prefer activities that allow them to use organizational, clerical, and arithmetic skills. They often prefer activities that require attention to detail and accuracy. Some typical Conventional occupations include Accountant, Bank Teller, Budget Analyst, Computer Operator, Court Reporter, Human Resource Assistant, Immigration and Customs Inspector, and Pharmacy Technician.



Three Important Aspects of Holland's Theory

Several important aspects of Holland's theory stem from the hexagonal model of the RIASEC types. Three such aspects - congruence, consistency, and differentiation - all describe the relationships between the individual and the work environment in terms of the RIASEC types.

Congruence

Congruence is a measure of the goodness of fit - or matches - between a personality type and a work environment. Congruence is highest when the personality and work environment types are the same and lowest when the personality and work environments are opposite types. Congruence is important because it is related both to job satisfaction and job stability. All things being equal, the greater the congruence, the greater the job satisfaction. This is because work environments provide a place for people to use their skills and abilities and to express their attitudes and values. When congruence is high, there is a good match between the individual and the work environment. This is because, for example, Realistic environments need people with "realistic" skills and preferences, and Realistic people would find that they are needed in Realistic environments. This increases the likelihood that the individual will be appreciated and valued, which in turn leads to higher levels of job satisfaction. The same reasoning explains why high congruence is associated with greater job stability, and low congruence is associated with lower job stability.

Consistency

Sometimes individuals or work environments possess similar, and mostly compatible, characteristics; when they do, they are consistent. Sometimes, however, individuals or work environments contain mostly

incompatible characteristics; when they do, they are inconsistent. Using RIASEC codes, such consistency is easy to assess. One way to accomplish this is to assess the relationship between an individual's (or work environment's) primary and secondary types. People or environments with adjacent primary and secondary types (e.g., Realistic - Investigative) are the most consistent because they emphasize similar, and mostly compatible, characteristics. The least amount of consistency exists when the primary and secondary types are opposite each other (e.g., Realistic - Social) because each type contains aspects that are incompatible with the other type.

Differentiation

Individuals and work environments differ in the degree to which they resemble an ideal type. Holland calls this differentiation, and it is directly related to the RIASEC pattern that best describes an individual or work environment. The more a person's or environment's RIASEC pattern resembles just one type, the greater the differentiation. One way to assess the degree of differentiation is to look at the primary and secondary types. For example, all Realistic-Investigative (RI) work environments contain elements of both types, but they may differ in their proportions. One particular RI environment may consist mostly of Realistic characteristics, with only a small or moderate number of Investigative characteristics. Another may consist of roughly equal proportions of Realistic and Investigative characteristics. In this example, the first work environment would be considered more differentiated than the second because it is more purely Realistic than the second environment, which could be just as easily labeled either Realistic or Investigative. Individuals who exhibit greater differentiation are more likely to know what their career interests might be and are likely to require less assistance in career exploration.