Version 3.0



interest profiler

User's Guide



U.S. Department of Labor Employment and Training Administration





SPECIAL NOTICE: USER'S AGREEMENT

The O*NET[™] Career Exploration Tools are composed of the WORK IMPORTANCE LOCATOR, INTEREST PROFILER, and ABILITY PROFILER products and are owned by the U.S. Department of Labor, Employment and Training Administration (DOL/ETA). All O*NET Assessment/Counseling Tools are copyrighted. O*NET is a trademark of DOL/ETA.

The DOL/ETA developed the O*NET Career Exploration Tools as career counseling, career planning, and exploration tools. In order for each tool to provide an objective assessment, extensive research and development was conducted to ensure that the directions, format, items, and score reports lead to valid assessment. DOL/ETA adhered to the high standards of the American Psychological Association, the American Education Research Association, and the National Council on Measurement in Education in developing the O*NET Career Exploration Tools. In developing the tools, fairness analyses were conducted to ensure that score results were equally valid both from a statistical and a usability perspective.

Results provided from the O*NET Career Exploration Tools are part of a whole-person approach to the assessment process. They provide useful information that individuals can use to identify their strengths, the parts of work they like to do, and the parts of work that they may find important. Individuals can use results to identify training needs and occupations that they may wish to explore further. Individuals are strongly encouraged to use additional information about themselves with O*NET Career Exploration results when making career decisions.

As such, the use of the O*NET Career Exploration Tools is authorized for career exploration, career planning, and career counseling purposes only. Each O*NET Career Exploration Tool must be used consistent with its own "User's Guide." No other use of these tools or any part of the tools is valid or authorized.

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SPECIAL NOTICE: DEVELOPER'S AGREEMENT

Users intending to develop other products, software or systems applications using O*NET Career Exploration Tools products must contact the National O*NET Consortium at <u>http://www.onetcenter.org</u> or National O*NET Consortium, North Carolina Employment Security Commission, P.O. Box 27625, Raleigh, NC 27611, for the Developer's Agreement.

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The development of the **O*NET Interest Profiler** was directed by Phil Lewis and David Rivkin, who also authored this Guide. Eight research phases were conducted in support of the development of the instrument, each of which required multiple steps and the participation of a wide variety of staff, contractors, and pilot sites. Grateful acknowledgment for their prominent roles in this process is made to Jeannie Stroupe, Ann Kump, Dr. James Rounds, Diana Williams, Ronald Boese, Dr. Brian Young, Helen Tannenbaum, Maureen Mendick, Brenda Dunn and Jerry Pickett. A special thanks is given to Dr. René V. Dawis for the technical contribution and guidance he provided at the conception of the project.

OVERVIEW

The U.S. Department of Labor's (DOL) Office of Policy and Research has developed **O*NET™ Career Exploration Tools**, a group of career counseling tools. The tools are designed to assist a wide variety of users with identifying information about themselves. They can use this self-knowledge to guide their exploration of occupations included in **O*NET OnLine**, the automated replacement for the *Dictionary of Occupational Titles* (U.S. Department of Labor, 1991a).

The tools stress self-directed whole-person assessment. Users are able to take a variety of valid and reliable assessment tools, each providing important information that can help them explore the world of work. **O*NET Career Exploration Tools** include:

- The **O*NET Interest Profiler**, which helps individuals identify their work-related interests. It is a paper-and-pencil instrument.
- The **O*NET Computerized Interest Profiler**, which is similar to the **O*NET** Interest Profiler, but is a computerized instrument.
- The **O*NET Work Importance Profiler**, which helps users decide what is important to them in a job. It can help individuals identify occupations they may find satisfying. The questions are answered on a computer.
- The O*NET Work Importance Locator, which is similar to the O*NET Work Importance Profiler, except that the questions are answered and scored in a booklet.
- The **O*NET Ability Profiler**, which helps individuals identify what they can do well.

Thus, these assessment tools help individuals discover three important pieces of information that are valuable when exploring careers:

- 1) what they like to do,
- 2) what is important to them in the world of work, and
- 3) what they do well.

O*NET Career Exploration Tools are designed to be interactive and flexible. Individuals are able to take one or all of the instruments, depending on their particular needs. They also may take the tools in conjunction with privately developed career counseling tools. Additionally, the **Interest** and **Work Importance** tools can be self-administered, with no outside assistance. All of the tools present individual users with score reports that are self-interpretable. The **O*NET Career Exploration Tools** and their associated reports are useful also for group settings, such as vocational training programs, classrooms, or out-placement programs. This User's Guide was developed for the paper-and-pencil version of the **O*NET Interest Profiler** (IP) in order to help users:

- 1) learn how to administer the IP,
- 2) interpret IP results using the O*NET Interest Profiler Score Report, and
- 3) understand how the IP was developed.

User guides are available also for the other **O*NET Career Exploration Tools**. For information on these guides or other O*NET products, contact the National Center for O*NET Development:

Internet:	
http://www.onetcenter.org/	

E-mail: o*net@ncmail.net Mail: Customer Service National Center for O*NET Development Post Office Box 27625 Raleigh, NC 27611

FAX: (919) 715-0778

SPECIAL NOTICE: PROPER USE OF O*NET INTEREST PROFILER RESULTS

Please pay particular attention to the proper use of **O*NET Interest Profiler** results. Part of your responsibility as an administrator/user of the **O*NET Interest Profiler** is to ensure its proper use.

O*NET Interest Profiler results **should be used** for career exploration and vocational counseling purposes only. Results are designed to assist clients in identifying their interests and using them to identify occupations that may satisfy their interests.

O*NET Interest Profiler results **should not be used** for employment or hiring decisions. Employers, educational programs, or other job-related programs should not use **O*NET Interest Profiler** results in applicant screening for jobs or training programs. The relationship between results on the **O*NET Interest Profiler** and success in particular jobs or training programs has not been determined.

Please read the **Special Notice: User's Agreement** on page i of this Guide before administering the **O*NET Interest Profiler**.

For further information on the proper use of the O*NET Interest Profiler results, contact:

National Center for O*NET Development Attention: Customer Service Post Office Box 27625 Raleigh, NC 27611

Phone: (919) 733-2790 FAX: (919) 715-0778 E-mail: <u>o*net@ncmail.net</u>

INTRODUCTION

One of the U.S. Department of Labor's (USDOL's) **O*NET™ Career Exploration Tools** is the **O*NET Interest Profiler** (IP), a new vocational interest assessment instrument. Clients receive an accurate, reliable profile of their vocational interests that:

- 1) provides valuable self-knowledge about their vocational personality types,
- 2) fosters career awareness of matching occupations, and
- directly links the client to the entire world of work via the 900+ occupations within O*NET OnLine.¹

The **O*NET Interest Profiler** is based on the most up-to-date knowledge of vocational theory and practice. The instrument is composed of 180 items describing work activities that represent a wide variety of occupations, as well as a broad range of training levels. Interest Areas are compatible with Holland's (1985a) R-I-A-S-E-C constructs: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. The Holland typology is grounded in a rich and extensive research history, is widely accepted and used by counselors, and is well received by clients when used in either automated or paper-and-pencil delivery formats.

This Guide was developed for programs (e.g., schools, employment service offices, career information and delivery systems, out-placement programs) that will incorporate the IP into their career exploration services. The Guide can help users understand how to properly incorporate the IP into their programs by providing (1) administration instructions, (2) guidelines for interpreting results, and (3) technical development information.

This User's Guide is divided into the following three sections:

- 1) Administering the O*NET Interest Profiler provides a description of individual, group, and combination administration options. This section also walks the user through the different parts of the IP.
- 2) Interpretation of O*NET Interest Profiler Results provides:
 - (1) an overview of Holland's vocational theory, the underlying structure behind the IP;

¹ The occupations within O*NET OnLine are based on the O*NET/SOC classification system. The Office of Management and Budget has mandated the use of the SOC system for government agencies. Thus, the O*NET classification system will be compatible with other sources of occupational and labor market information. Currently, 900 of the 974 occupations have O*NET data and are included within the Interest Profiler materials.

- (2) a description of how the IP Score Report can be used to interpret IP results;
- (3) explanations of how the Score Report helps users identify occupations to explore further;
- (4) other activities that can be used to help users better understand and use their IP results; and
- (5) information about how to contact the National Center for O*NET Development if more assistance or information is needed.
- Development of the O*NET Interest Profiler provides an overview of the procedures followed to develop the O*NET Interest Profiler. This includes item and scale development, as well as IP format development.

Note: This section contains detailed technical information that is important to vocational researchers. It also contains information that will provide educators and vocational counselors with a better understanding of the steps that went into ensuring that the IP meets stringent technical standards. For a more detailed description of the development of the IP, see *Development of the O*NET Interest Profiler* (Lewis & Rivkin,1999). To learn more about the psychometric characteristics of the IP, see *O*NET Interest Profiler: Reliability, Validity, and Self-Scoring* (Rounds, Walker, Day, Hubert, Lewis, & Rivkin, 1999).

Together, these three sections, along with the IP and its Score Report, provide users with the information needed to use the instrument effectively in their organization's career counseling program.

ADMINISTERING THE O*NET INTEREST PROFILER

The **O*NET Interest Profiler** (IP) can be administered in several ways. Although the instrument was primarily designed to be self-administered—clients taking the instrument on their own with no outside assistance—the instrument can also be administered in a group setting. Additionally, combinations of administration methods can be used. You can have clients do part of the IP on their own and part of it in a group. They can take the instrument by themselves and then receive assistance from a career counseling professional in the interpretation of their scores.

BEFORE ADMINISTERING THE O*NET INTEREST PROFILER

Each of the different administration methods is described below. Before administering the IP, it is important to review all the methods. You will notice that the different methods build on each other and that the information presented for one method can help accomplish another method. It is especially important to read the Self-Administration subsection because it explains the different parts of the **O*NET Interest Profiler**. After reading about each administration method, you will be able to use a method, or parts from each method, that best suits your particular situation.

Also, before administering the IP, it is very important that you take the instrument yourself to become familiar with all the IP parts and procedures.

SELF-ADMINISTRATION

The **O*NET Interest Profiler** was designed to be self-administered. The instrument contains all the necessary instructions for individuals to complete the measure on their own. Below are some commonly asked questions that users of the IP have regarding self-administration. The answers provided will enable you to make sure clients enjoy their IP experience and receive accurate, meaningful results.

What reading level is the O*NET Interest Profiler designed for?

The IP was designed for use with a wide variety of populations, including workers in transition, unemployed workers, college students, and junior high and high school students. It is suggested that clients have a minimum of an eighth grade reading level to take the IP. Clients below an eighth grade reading level may not be able to adequately understand the information in the IP.

What age levels was the O*NET Interest Profiler designed for?

The IP was designed for clients who are 14 years of age and older. Individuals younger than 14 may not have had broad enough life experiences to respond to the IP questions. Also, individuals younger than 14 probably have not really crystallized their interests. They probably are still in the process of developing *strong* interests.

Where is the best place to "self-administer" the O*NET Interest Profiler?

Individuals can take the instrument in a variety of places. Clients can take it at home, in school, in the library, or in another quiet location where they will be able to concentrate and respond seriously to IP questions.

How long will it take clients to complete the O*NET Interest Profiler?

The IP takes anywhere from **20 to 60 minutes to complete**. For most users, about three-fourths of their time is spent answering questions, and the rest of their time is spent scoring the instrument. After completing the instrument, additional time is needed to read and use the IP Score Report, which helps clients interpret their results and explore occupations presented in **O*NET OnLine**. **Note:** The **Instrument Interpretation** section of this Guide provides more details on how the Score Report helps clients understand and use their results for career exploration.

Can clients complete the O*NET Interest Profiler in one session?

Yes. The instrument was **designed to be completed in one session**. Clients should try to answer all questions and score the instrument at one time. This will provide continuity to the administration process and will help clients better understand the information the IP is trying to convey. If for some reason clients do not have time to complete the entire instrument in one session, they can do it in two sessions.

- 1) First, they can complete all the IP questions. It is important that they answer all questions at one time. Questions presented early in the IP may influence how a client answers later IP questions.
- 2) Then, during another session they can complete the scoring section of the instrument. It is important that clients complete the scoring at one time to avoid making errors. Clients are more likely to make scoring errors if they try to score the IP during several sessions.

PROCEDURES FOR SELF-ADMINISTRATION OF THE O*NET INTEREST PROFILER

The IP contains all the necessary information for clients to complete the instrument on their own. An overview of the instructions individuals read and follow to complete IP items and to score the IP is presented below.

Instructions for Completing the O*NET Interest Profiler

To start their IP, clients simply open the instrument and begin reading.

Overview

First, they are presented with an overview of the **O*NET Career Exploration Tools**. This section provides users with a brief description of the different O*NET assessment tools. It lets the clients know that the assessment tools can help them decide:

- what is important to them in a job,
- what work they probably will be able to do well, and
- what type of work they would like to do.

It also indicates to clients that they can use different pieces of information about themselves to explore careers.

Getting Started

Next, clients complete the **Getting Started** section on page 1 of the IP. Here clients write their name and the date in the spaces provided. They also read **Welcome to the O*NET Interest Profiler**, which lets them know that they will be answering a series of questions that will help them identify their work-related interests and that they can then use these interests to explore careers.

This section also stresses the proper use of **O*NET Interest Profiler** results. It lets clients know that results are for career exploration and vocational counseling purposes only, and that they should not be used for employment selection or screening decisions. It also informs clients to contact the National Center for O*NET Development for further information on the proper use of their **O*NET Interest Profiler** results.

<u>Hints</u>

On page 2 of the IP, clients read **Hints for Completing the O*NET Interest Profiler**. This section provides clients with general instructions for completing the IP. It tells them to work carefully. Importantly:

• it explains *what* to "think about" (e.g., whether they like or dislike an activity)

• what *not* to "think about" (e.g., education and training required or money you would make) when answering IP questions.

Finally, this section encourages clients to relax and take their time while completing the IP.

Completing the O*NET Interest Profiler

Next, clients move on to **How to Complete the O*NET Interest Profiler** on page 3. This section gives more specific instructions for completing the measure. First, instructions are presented for choosing a response option:

- If clients "Like" the activity described in an item, they fill in the "L" box.
- If they "Dislike" the activity described, they fill in the "D" box.
- If they are "Unsure" of whether they like or dislike the activity described, they fill in the "?" box.

The instructions continue by explaining the order in which to complete the items. Clients must **work from top to bottom** in each column of items presented. These instructions are repeated several times throughout the instrument because it is **critical that individuals complete the items in the correct order**. Score interpretation information is based on the clients taking the items in a specific order. If clients "jump around" when completing items, the score interpretation information may not be accurate for their results. In addition, answering the items in order reduces the likelihood that items will be skipped.

After reading the instructions, users are directed to page 4 where they begin completing IP items. Items are presented in columns. There are several "reminders" for individuals to work down the columns.

Items are color coded to facilitate scoring the instrument and interpreting results. There are six color bands of items. Items in the same color band represent a particular Interest Area:

- Items in the green boxes are "Realistic" work activities.
- Items in the pink boxes are "Investigative" work activities.
- Items in the orange boxes are "Artistic" work activities.
- Items in the purple boxes are "Social" work activities.
- Items in the yellow boxes are "Enterprising" work activities.
- Items in the blue boxes are "Conventional" work activities.

These Interest Area titles are not presented to users until after they complete the items in the IP, so that they do not influence client responses (e.g., indicating like or dislike for a particular item).

Note: The Interest Areas are described in more detail in the **Interpretation of Results** section of this Guide.

Individuals are presented with a **total of 180 items** to complete. After item number 180, they are directed to "Turn to the next page for scoring instructions."

INSTRUCTIONS FOR SCORING THE O*NET INTEREST PROFILER

After completing the items on page 7 of the IP, users are instructed to turn the page. Here they see:

- 1) a **Scoring Example** showing a two-page graphical example of how to score the IP and
- 2) a fold-out **Scoring Flap**, titled **Here's How to Score Your O*NET Interest Profiler**, which provides step-by-step scoring instructions.

Scoring Flap Instructions and Scoring Example

Clients should read all the instructions on the **Scoring Flap** and review the **Scoring Example** before they score the instrument. The **Scoring Flap** instructs users to:

- First, count the number of "Likes" they marked for the "green" questions on pages 4 and 5 and then record the number in the first green box on the inside of the scoring flap.
- Second, count the number of "Likes" they marked for the "green" questions on pages 6 and 7 and then record the number in the second green box on the inside of the scoring flap.
- Third, add the numbers in the two green boxes (e.g., "Likes" from pages 4 and 5 and "Likes" from pages 6 and 7) and write the total in the white box provided.

Note: This total equals the client's score for the particular Interest Area.

• Fourth, repeat steps 1, 2, and 3 for the pink questions, orange questions, purple questions, yellow questions, and blue questions.

Scoring should result in a total of six scores, one for each of the six RIASEC Interest Areas.

After reading the information on the **Scoring Flap**, clients are instructed to look at the **Scoring Example** to the left. The scoring example provides a graphical illustration on how to score the IP. It gives a case example to demonstrate how to count, add, and record IP scores. The scoring example reinforces the information presented on the **Scoring Flap**.

Completing the Scoring Flap

Once users have looked at the **Scoring Example**, they are instructed to open the **Scoring Flap** and begin scoring. When they open the flap, they will see six colored boxes, one for each of the colored groups of items. Each box contains summarized scoring instructions that clients have already seen on the **Scoring Flap** and **Scoring Example**. A scoring tip on the top of the flap encourages clients to count their "Likes" carefully and to double check their totals. The Interest Area name that each colored band of items represents is also presented (e.g., Realistic, Investigative, Artistic, Social, Enterprising, Conventional).

Note: Scoring instructions are presented in three places: 1) the outside of the **Scoring Flap**, 2) the **Scoring Example**, and 3) the inside of the **Scoring Flap**. This overlap of instructions is included in the IP layout to give clients every opportunity to score the IP correctly.

Once individuals have finished scoring their instrument, they are instructed to turn to their **O*NET Interest Profiler Score Report** to begin exploring careers.

Helpful Reminders

The **O*NET Interest Profiler** was extensively pilot-tested by individuals from a variety of age, experience, and education levels. The vast majority of individuals did not have trouble completing and scoring the IP on their own. However, there are a few reminders you can give clients to help ensure that they get the most out of the instrument and receive a true picture of their interests.

- A. **Remind clients to read all instructions carefully**. All the necessary information needed to successfully complete the IP is included on the instrument itself. However, sometimes clients may skip over important information. They may think they don't need to read every word because they "get" how to complete the IP. If users skip instructions, they might miss something important, which will influence how they complete and score the instrument. If this happens, their results might not reflect their true interests.
- B. **Remind clients to answer the questions in order**. Remember, it is important for clients to work from top to bottom down the columns of items. Sometimes

individuals try working across the pages, following the color bands, rather than working down the columns. For clients to get the most meaningful results, they need to answer the questions in the correct order.

- C. **Remind clients to count their "Likes" carefully**. Sometimes users miss "boxes" when counting or they fail to count both rows of boxes located within each colored band when adding up their "Likes." It is important that clients double-check their counting and adding so that they record accurate scores.
- D. **Remind clients to take their time and enjoy themselves**. The IP is not a test. The IP is an assessment tool designed to help clients identify information about themselves that they can use to explore the world of work. Remind them that there are no time limits! Clients should relax and take advantage of the information the IP has to offer.

GROUP ADMINISTRATION

The **O*NET Interest Profiler** is also suited to group administration. The term "group administration" has a variety of definitions that are often dependent on the type of instrument being administered. For the IP, group administration means that a professional (e.g., counselor, teacher, program leader) leads the administration of the IP and provides assistance to IP users. It can include, but is not limited to, the following procedures:

- Reading the instructions aloud to clients as they read along with the leader. You can also have individuals take turns reading parts of the instructions aloud.
- Answering clients' questions regarding IP instructions, including how to fill in boxes, what to think about when they are completing items, and in what order the items should be completed.
- Monitoring clients as they complete IP items, making sure that they work down the columns of questions.
- Answering clients' questions about specific items. For example, a client might not understand or be familiar with a particular work activity.
- Working step-by-step through the scoring procedures. For example, the leader may choose to read aloud the instructions on the **Scoring Flap**. The leader could then read the **Scoring Example** to the clients as they follow along. Another option

includes having the clients first score the "green questions," checking their totals, and then having them move on and score the next colored band of items.

Below are some questions and answers regarding group administration that can help you decide if you want to administer the IP in a group setting.

What locations are better for group administration?

Just like self-administration, a group administration should take place in locations where individuals will be able to concentrate and focus on the IP. A classroom or library is ideal for a group administration. Clients can sit at individual desks, or they can sit around a table to facilitate group interaction during discussion of results (see the **Interpretation of Results** section of this Guide). It is very important to remember, however, that clients should answer IP questions on their own, based on what *they think*, not on what fellow group members think.

When is it appropriate to administer the IP in a group setting?

You may want to make the IP part of a vocational training program in which clients talk about their results and how the IP helped them discover important information about themselves. You may want clients to discuss other parts of their lives (e.g., outside jobs, sports they play, volunteer work they are involved with, courses they particularly like) that reflect their results.

You may think that the particular clients you are working with will require "extra help" to complete the IP. For example, clients may have below an eighth grade reading level, or they may be very unfamiliar with taking surveys, or they may have trouble focusing on a task. Group administration is also appropriate for individuals who might have some trouble with the English language (e.g., English-as-a-Second-Language students).

How long will it take to conduct a group administration of the IP?

Group administrations should take about 50 minutes. This includes leading clients through the instructions and scoring the instrument.

Can a group administration be held over two sessions?

Yes. As with self-administration, we recommend a single session in which clients take and score the instrument. However, if this is not possible, you can split group administration into two parts. During the first part, clients can answer the questions. During the second part, they can score the instrument. Interpretation of results, which is discussed in the next section of this Guide, can take an additional session or two.

Are there certain things I should pay particular attention to during a group administration?

Yes. The same "reminders" that were presented in the self-administration subsection apply to group administration. These reminders are summarized below:

- A. Clients should read instructions carefully.
- B. Clients should work down the columns of items.
- C. Clients should count their "Likes" carefully and double-check their scoring.
- D. Remind clients that the **O*NET Interest Profiler** is not a test. Individuals should take their time. Remind clients that they should enjoy themselves.

How many clients can participate in an IP group administration at one time?

The maximum number for a group administration should be about 25. Any group larger than this will make monitoring the completion and scoring of items on the IP difficult. There is no minimum size requirement for group administration of the IP. For example, you might decide to do a group administration for two clients if you have the time or if the clients require special attention.

COMBINING ADMINISTRATION METHODS

Another option available to you is to combine methods of administration. That is, you might decide to provide assistance to some individuals throughout the entire process, while you might have other clients take the majority of the instrument on their own, and you would only provide assistance during certain portions of administration. Two examples of combination strategies that you may want to use are described below:

Providing Assistance to an Individual Client

You might have a client who has poor reading skills and/or trouble focusing on tasks. For this client, you could have a one-on-one session, with each of you taking turns reading the instructions. You could help the client complete individual items. You could then help the client score the instrument, perhaps scoring the first colored band of items with the client, and then letting the client continue on her/his own. Check the individual's work as progress is made through the different colored bands of questions.

Note: If, after receiving help on the first couple of items, the client can not complete the remaining items on his/her own, the instrument is probably not appropriate for the individual. Also, it is important to remember that the instrument has approximately an eighth grade reading level.

Of course, the amount of assistance you provide to an individual client depends on the client's skills and abilities. Thus, unlike the person described above, you might have a client who can read instructions on his/her own and complete the items without assistance, but who needs help scoring the instrument. With this client, you could simply start the person on the instrument, give him or her the proper "reminders" (see **Self-Administration** subsection for a list of reminders), and then assist the client in scoring the instrument.

Combining Self-Administration and Group Administration Methods

The **O*NET Interest Profiler** is designed to be flexible, so that different methods of administration can be used or combined. It is perfectly acceptable to combine selfand group administration methods. For example, you might decide to have clients read the instructions on their own, take the instrument home and answer the items, and then bring it back. You could then have them score the instrument as a group, walking them through the different scoring steps. Or, you might reverse what clients do on their own versus in a group. You could walk clients through the instructions, monitoring them as they complete items, and then have them score the IP on their own. Again, the level of assistance you provide a single client or a group of clients depends on their capabilities. Based on your experience with the individuals, you can decide what they can do by themselves and where they might need some help.

In the section that follows, **Interpretation of O*NET Interest Profiler Results**, the flexibility of the **O*NET Interest Profiler** is demonstrated once again. As with administration, the score interpretation materials were designed for clients to use on their own. However, you may feel the need to provide some additional assistance to your clients, or you might elect to hold group interpretation sessions as part of your classroom activities.

INTERPRETATION OF O*NET INTEREST PROFILER RESULTS

The **O*NET Interest Profiler** was designed to enable the majority of people to interpret and use their results for career exploration on their own. Along with the instrument, clients receive an **O*NET Interest Profiler Score Report**. This report helps them understand what their results mean and provides instructions for applying their results to explore careers using **O*NET OnLine**, an application available on the Internet at <u>http://www.onetcenter.org</u>. **O*NET OnLine** helps clients explore the occupational information in the O*NET database.

Information presented in the following subsections of this Guide includes:

- Background information on Holland's Vocational Personality Theory (Holland, 1985a). The O*NET Interest Profiler was designed to be compatible with Holland's theory. A familiarity with the theory and model will help you understand the design and intent of the IP and its Score Report.
- A description of each part of the Score Report, including an explanation of the information each part communicates to clients.
- Possible challenges that clients might face with a particular portion of the Score Report. Descriptions of the challenges are presented along with solutions that you can use to help clients better understand the Score Report.

Note: As mentioned previously, the IP Score Report was designed for self-use. You may prefer, however, to assist clients in interpreting their results.

• Suggestions for program activities that you can use to help clients interpret and use their results.

OVERVIEW OF HOLLAND'S VOCATIONAL PERSONALITY THEORY

The **O*NET Interest Profiler** is compatible with Holland's (1985a) Theory of Vocational Personality. This is one of the most widely accepted approaches to vocational choice. According to the theory, there are six vocational personality types. Each of these six types and their accompanying definitions are presented below.

Realistic:

People with **Realistic** interests like work activities that include practical, hands-on problems and solutions. They enjoy dealing with plants, animals, and real-world materials like wood, tools, and machinery. They enjoy outside work. Often people with Realistic interests do not like occupations that mainly involve doing paperwork or working closely with others.

Investigative:

People with **Investigative** interests like work activities that have to do with ideas and thinking more than with physical activity. They like to search for facts and figure out problems mentally rather than to persuade or lead people.

Artistic:

People with **Artistic** interests like work activities that deal with the artistic side of things, such as forms, designs, and patterns. They like self-expression in their work. They prefer settings where work can be done without following a clear set of rules.

Social:

People with **Social** interests like work activities that assist others and promote learning and personal development. They prefer to communicate more than to work with objects, machines, or data. They like to teach, to give advice, to help, or otherwise be of service to people.

Enterprising:

People with **Enterprising** interests like work activities that have to do with starting up and carrying out projects, especially business ventures. They like persuading and leading people and making decisions. They like taking risks for profit. These people prefer action rather than thought.

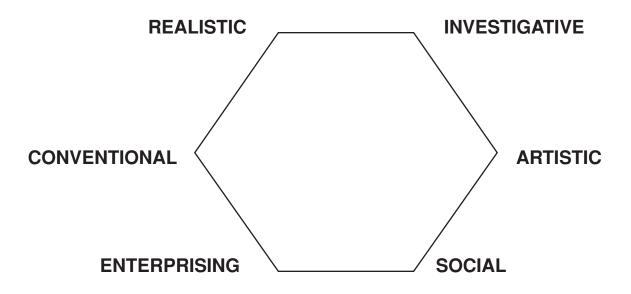
Conventional:

People with **Conventional** interests like work activities that follow set procedures and routines. They prefer working with data and detail rather than with ideas. They prefer work in which there are precise standards rather than work in which you have to judge things by yourself. These people like working where the lines of authority are clear.

According to Holland (1985a), most individuals can be described by one or more of these six personality types, frequently summarized as R-I-A-S-E-C (the first letter of each personality type). Additionally, the theory proposes that there are six corresponding work environments (or occupational groups)—and that people seek out work environments that match their personality types. The better the match individuals make, the more satisfied they will be with their job.

It is important to note that an individual's interests may not be described by just one of the six interest categories. In fact, Holland suggests that most people will have interests in several of the areas, but that they will probably have one Interest Area that is stronger than the others. Like people, environments or occupations may not be best represented by one Interest Area. They also may be represented better by several areas. Because of this heterogeneity in the interests of people and occupations, several Interest Areas usually serve as the most appropriate representation of an individual's interests, as well as the interests that a work environment (or an occupation) satisfies. Thus, you will see that the IP allows clients to use both their primary and secondary Interest Areas to explore occupations.

Holland's theory also suggests that the RIASEC areas are related in a hexagonal fashion based on how similar they are to one another. The figure below illustrates the relationship between Interest Areas.



According to Holland, adjacent Interest Areas are most similar to one another (e.g., Artistic with Investigative and Social). Interest Areas that are opposite to one another (e.g., Enterprising and Investigative) are most dissimilar. Interest Areas that are alternate to one another (e.g., Realistic and Enterprising or Investigative and Social) have an intermediate relationship. It is important to understand this hexagonal relationship because, ideally, individuals will want to explore occupations that have the strongest relationship with their primary Interest Area, rather than the weakest. For example, a person with strong Artistic interests would probably be most satisfied with strong Artistic occupations (e.g., typist, word processor, mail room clerk). The next two occupational groups that this person would find satisfying (after Artistic occupations) would likely be Investigative or Social occupations.

The purpose of the IP and its corresponding occupational lists is to help clients match their personality type (Interest Area) to corresponding work environments (occupations). The better the match, the more likely that clients will be satisfied with the occupations they choose to explore.

For more information on Holland's Vocational Theory, read *Making Vocational Choices: A Theory of Vocational Personalities and Work Environments* (Holland, J.L., 1997).

O*NET INTEREST PROFILER SCORE REPORT

Below, each section of the O*NET Interest Profiler Score Report is described.

Name and Date

Clients should write their name and the date in the spaces provided on the front page immediately after they receive their **O*NET Interest Profiler Score Report**. Recording this information will give clients a better chance of keeping track of their Score Report.

The O*NET Interest Profiler: How can it help you?

This section reminds clients that they completed the IP to identify their work-related interests. It tells them that the questions on the IP represent work activities that can be grouped into six broad Interest Areas. This section also introduces clients to the concept of "strongest" interests, which are important to career exploration.

Finally, this section reinforces the notion of the proper use of **O*NET Interest Profiler** results. It reminds clients that results should be used for career exploration purposes only, and that they should not be used for employment selection or applicant screening.

What are your Primary and Secondary Interest Areas?

This section allows clients to identify their strongest Interest Areas. First, they are instructed to copy their interest scores from the IP in the six spaces provided, one for each of the six RIASEC areas. Clients should copy their scores from the inside of the IP **Scoring Flap** to the spaces provided on the Score Report. **Note:** This is the first time clients see the abbreviation RIASEC, which represents the six IP Interest Areas.

After copying their scores, clients turn to page 2 of the Score Report where they are asked to identify and note their **Primary** and **Secondary Interest Areas**. For their **Primary Interest Area**, clients are instructed to select their Interest Area with the highest score. However, they are also informed that if their two highest scores are

within five points or less of each other, they should consider both scores. **Primary** scores that are less then five points apart are not significantly different and may indicate that the client has two **Primary** interests.

After the **Primary Interest Area(s)** is identified, the next two highest Interest Areas serve as the client's **Secondary Interest Areas**.

A summary sheet designed to help clients gather all of the information they will need to explore careers is located on page 11. Clients are instructed to write their **Primary** and **Secondary Interest Areas** in the spaces provided on this sheet. Clients are encouraged to start exploring careers that are related to their **Primary Interest Area.** If they are not happy with the occupations they are initially directed towards, they can use their **Secondary Interest Areas** to find a different selection of careers.

Possible Client Challenges

- Clients might forget to write their Interest Area information on the summary sheet (page 11).
- Some clients might have trouble copying their scores from the IP Scoring Flap.
 Point out to clients that each colored box on the flap contains the name of the Interest Area.
- Clients might have trouble identifying their Primary and Secondary Interest Areas. Remind them that they are looking only for their highest scores. Also, remind them that if their highest scores are less than five points apart, they should consider the scores to be tied.

Note: The five point rule applies to both primary and secondary scores.

If clients have multiple primary or secondary scores, let them know that they should start exploring careers with the area they think best represents their interests based on their experiences. Remind your clients that they will have the option to go back and start a new career exploration using their other Interest Areas.

Using Your Interests to Explore Careers

This section of the Score Report shows clients how the Score Report is organized and gives them an idea of what they can expect to accomplish by using the IP. It helps clients learn that there is a variety of information about themselves that is useful when exploring careers and that their interests are just one of the pieces. Clients are introduced to the concept of *whole-person assessment*—the more you know about yourself, the more likely it is that you can find satisfying work.

What Your Primary Interest Area Means

This section of the Score Report provides clients with definitions for each of the six RIASEC Interest Areas. Each definition includes examples of activities that individuals with that interest type like to perform, as well as examples of activities that they usually do not like to perform.

Possible Client Challenges

- Clients may not understand the definitions provided.
 - Try to give clients real-world examples of activities related to the Interest Area, such as school courses, school clubs, or job duties. For example, if a client's Primary Interest Area is Artistic, you can suggest painters or actors. You can discuss special art classes at school or a drama club. You can look at the occupational listings included in clients' Score Reports for job examples.
- Clients might think the Interest Areas with their highest scores don't represent them.
 - Inform clients to keep working through the Score Report because in later sections options for changing or re-evaluating their IP results are presented.

What occupations are linked with your interests?

This is a critical section of the Score Report. It introduces clients to the process of linking their interests to occupations. First, it explains to clients that the Score Report contains six occupational lists, one for each Interest Area. The occupations included in each list are those that will most likely satisfy individuals with that particular interest.

Additionally, the concept of Job Zones is introduced to clients. Each of the six occupational lists are further divided into five Job Zones. Each Job Zone contains occupations that require similar levels of education, training, and experience. This information is important for clients to consider when exploring careers. It helps clients get an accurate picture of how much preparation is required to pursue certain occupations. Thus, when exploring careers, it is not enough to just "like" or be

interested in an occupation. You must also consider the amount of education, training, and experience needed to qualify for and be successful in occupations.

Note: Occupations were placed in Job Zones based on Specific Vocational Preparation (SVP) ratings located in the *Dictionary of Occupational Titles* (DOT, U.S. Department of Labor, 1991a). For a further explanation of this process, see Oswald, Campbell, McCloy, Rivkin, and Lewis (1999).

Note: In the Score Report and in the **Interest Profiler O*NET Occupations Master List**, occupations have been sorted based on their Occupational Interest Profiles. See Rounds, Smith, Hubert, Lewis, and Rivkin (1999) for further description of the Occupational Interest Profiles. The majority of occupations are listed based on their Primary Interest Code within Job Zones. To provide clients with a variety of occupations to explore (i.e., present 20 occupations per Interest/Job Zone cell), where feasible, some occupations are included based on their Secondary or Tertiary Interest Code. To make the Score Report less cumbersome for clients, a maximum of 20 occupations per Interest/Job Zone cell are presented. For those cells where more than 20 occupations were present, a sample of occupations was drawn. Clients interested in the entire listing of occupations should refer to the Master List.

What is a Job Zone?

In this section clients learn more about why occupations are placed within Job Zones and how Job Zones can help them focus their career search. Clients are given a brief definition of each Job Zone and are introduced to the concepts of Current Job Zone and Future Job Zone.

The Current Job Zone for clients is comparable to the amount of education, training, and experience they have now. They can consider this amount of preparation when exploring careers, or they can use their Future Job Zone—the amount of education, training, and experience they expect to have in the future, after they finish high school, college, or a vocational training program.

For clients with less work experience, use of their Future Job Zone for exploring careers is probably more appropriate. This will give them broader exploration opportunities and will more accurately reflect their career aspirations. However, the Score Report does *not* tell clients which Job Zone type they should use to explore careers. It leaves the choice up to them.

Possible Client Challenges

- Clients might have a hard time deciding whether to use their Current or Future Job Zone to explore careers.
 - Suggest that clients with little work experience, who have not yet decided how much education to pursue, select a Future Job Zone. This will allow them to open their minds to possible careers that they may not have considered. Clients will get a better understanding of how "higher" job zones affect career choice.
- Clients may have a difficult time understanding the concept of Future Job Zone.
 - Encourage clients to think about themselves in the future. What do they want their lives to be like as adults if they could do anything they wanted? Encourage them to think about the "most" they can do in their lives.
- Clients with more education and experience should be encouraged to think about whether they would want to go back for more education "to start over," "for a second chance", or to try a new career.

Job Zone Definitions

This section of the Score Report contains complete definitions of the Job Zones. By reading each definition, clients will begin to learn the differences among the five Job Zones. As they move from Job Zone 1 to Job Zone 5, they will see that more experience, education, and training are required. For example, many occupations in Job Zone 1 require either a GED or a high school diploma, frequently need very little previous work-related experience, and usually involve simple training that can be delivered by a co-worker. In contrast, Job Zone 5 includes occupations that need the most overall preparation. These occupations frequently require advanced degrees, such as Ph.D., M.D., or J.D., and often at least four years of work-related experience.

Possible Client Challenges

- Clients might have difficulty distinguishing between Job Zones that are next to each other (e.g., the difference between Job Zones 3 and 4).
 - Clients should pay particular attention to the "Overall Experience" category within Job Zones. This section of the definition can help clients figure out the differences among Job Zones.
- Clients might need more "familiar" examples of occupations that fit into a particular Job Zone to really understand the Zone.
 - You may want to look at occupational "snapshots," which are included in O*NET OnLine, to find other examples of occupations within a Job Zone.

Which Job Zone suits you best?

This section has the clients select the Job Zone that they want to use to explore careers. Clients are asked several questions to help them focus on a Job Zone. Once again, they are instructed to think about whether they want to use their Current Job Zone or Future Job Zone to explore careers.

Clients are instructed to write down the Job Zone(s) they select in the spaces provided on the summary sheet located on page 11 of the Score Report.

Possible Client Challenges

- Clients might have difficulty understanding the differences between Job Zones.
 - As discussed in the Job Zone Definitions section above, clients might need more examples of occupations within a Job Zone in order to really understand the Zones.
- Clients might have difficulty deciding whether they should use their Current or Future Job Zone to explore careers.
 - Clients with little education and experience can be encouraged to use a Future Job Zone because this will provide broader career exploration opportunities. For some clients (especially those with more education and experience), it might be helpful to explore a variety of Job Zones, so they can see how their career opportunities expand as they achieve more education, training, and experience.

Exploring Careers Using Your Interests and Your Job Zone

Now clients are ready to use their interests and Job Zone(s) to explore careers. This section of the Score Report provides clients with a step-by-step description of how to use the information they discovered about themselves to explore occupations. These steps are summarized below.

1. Look at your Primary Interest Area occupations.

Clients are advised to use the summary sheet located on page 11 of the Score Report to look up their Primary Interest Area. They are then directed to look through the six occupational lists until they find the list with the title that corresponds with their Primary Interest Area. Notice that the occupational lists are arranged in RIASEC order.

2. Review the occupations in your Job Zone.

Clients are advised to use the summary sheet located on page 11 of the Score Report to look up their Job Zone(s). Clients are directed to:

- 1) Find the section of their interest list that matches their Job Zone.
- 2) Look at the occupations and write down in the space provided on the summary page the titles and codes of the occupations they want to start exploring.

Note: Each list of occupations is clearly divided into the five Job Zones, so clients should be able to find their Job Zone section easily.

3. Find out more about the occupations.

Here clients are instructed to look in **O*NET OnLine** to find out information about the occupations they want to explore.

Note: Clients should be able to use **O*NET OnLine** on their own for career exploration. You may, however, wish to hold an **O*NET OnLine** training session to help them locate the most important information for career exploration.

4. Check the Interest Profiler O*NET Occupations Master List.

This list is configured just like the lists in the Score Report, but it contains more occupations. Clients can look at the Master List to find more occupations linked to their interests and Job Zones. Clients are told that they can get this list from their teacher or counselor.

5. Still want more? Check your Job Zone and other Interest Areas.

Like Step 4, this step gives clients more options to find other occupations that they might like to explore. They are told to review their Job Zone selection to see if another Job Zone might be more appropriate. They also are told to explore occupations in their Secondary Interest Area. If they still would like more

occupations to explore, they can look at occupations in their third highest Interest Area. Finally, they are reminded to refer to the Master List for more occupations.

Again, the purpose of Step 5 is to encourage clients to expand their career exploration and to give them options for exploring occupations that they might find satisfying and rewarding.

6. Want to know about a particular occupation not on your list?

Some clients may have certain occupations that they want to explore which do not appear in their occupational lists because the occupations do not match their interests or Job Zone. This section of the Score Report informs clients that they can find those occupations in the Snapshot function of **O*NET OnLine.** The section also contains a series of questions that clients may want to consider when looking at a particular occupation. For example, under what Interest Area and Job Zone has the occupation been categorized? Do the clients really like the work that employees perform in the occupations, or is there something else about the occupations that attracted the clients to them (e.g., money, status)?

Clients are also provided with additional suggestions for learning more about the occupation, including:

- reading about the occupation in other reference materials,
- talking to someone who is actually in the job, or
- taking additional O*NET Career Exploration Tools to see how different pieces of information about themselves match the occupation.

The options are presented to clients to facilitate their ability to better assess their interest and likelihood of success in a particular occupation. By following these options, clients can develop more viable career aspirations.

Not really sure you agree with your results?

Some clients may decide that their IP results do not accurately reflect their interests. This section gives clients options designed to help them become more comfortable with their IP results. The goal of this section is to make sure that clients continue to explore careers even if they are not happy with their IP results. The IP was developed to encourage, not discourage, clients' career aspirations.

The options that clients can follow are presented below:

1. Check your scoring.

Clients are directed to:

- 1) check the number of "Likes" they counted on the IP for each colored band of items,
- 2) verify that they added each set of colored boxes correctly, and
- 3) make sure that they answered all questions on the IP.

2. Check your answers.

Clients are encouraged to double-check their answers to make sure that they really understood the instructions. For example, did they "not think about the education requirements or how much money they would make" when responding to items? If clients decide to change any of their answers, they are told to re-score the IP. If they feel they need to change a large number of their answers, they should be directed to take the entire instrument over again at a later date.

3. Take another look at the occupations listed in your highest Interest Area. As the title suggests, clients are told to re-examine occupations listed under their highest Interest Area to make sure that they did not overlook any occupations that they may want to explore.

4. Use your other highest Interest Areas to explore careers.

Here clients are told to use their Secondary Interest Areas to explore careers. They are asked a series of questions that should help them determine whether one of their Secondary Interests describes them better and might be more appropriate for them to use to explore careers.

5. Check out other Interest Areas.

If clients are not happy with any of their Interest Areas, they are told to look at the definitions for the other Interest Areas to see if any of those describe themselves better. They are told to explore some of the occupations under these interests to see if they feel any are worth pursuing.

6. Talk to someone about your interest results.

This section informs clients that perhaps a person whom they trust will be able help them better understand their IP results. Sometimes by talking to other people, clients can get a different perspective on their interests. Other people might be able to point out to clients activities they like to do (e.g., sports, hobbies, reading specific types of books, school courses), thus helping the clients to better understand their interests.

7. Try your interest results out.

Here, clients are encouraged not to give up. They are told that they might want to talk to someone actually in the occupation in order to get a better idea about what is actually involved in working in the field.

Using Your Interests with Other Career Exploration Tools

This section introduces the idea of using IP results along with **O*NET Work Importance Locator** (WIL) results. Clients are introduced to the notion of the **O*NET Occupations Combined List**, which allows them to use both their WIL and IP results to explore careers. A list of other career exploration tools is provided to clients, and the notion of using different pieces of information about themselves to explore careers is reinforced.

O*NET Occupations

In this final section of the Score Report, clients are presented six interest occupational lists, each divided into five Job Zones. Occupations within a Job Zone section are linked to that Job Zone, as well as to the overall Interest Area the list represents. Each occupation is described by an O*NET title and occupational code. Clients can use either the title or the code to find the occupation in **O*NET OnLine**.

On the cover page, clients are instructed to record (if they haven't already done so) their Interest Areas and their current and future Job Zones. They are also instructed to record in the space provided on the summary sheet (page 11) the occupations they want to explore in **O*NET OnLine**.

The majority of Job Zones within each interest occupational list contain 15 to 20 O*NET occupations. These occupations were selected because they are representative of the total group of occupations that are listed in the corresponding section of the **Interest Profiler O*NET Occupations Master List**. They also were selected because they represent different areas of the world-of-work.

SUGGESTIONS FOR SCORE INTERPRETATION PROGRAM ACTIVITIES

The IP Score Report also can be used to facilitate group sessions aimed at helping your clients interpret their results. For example, you can work step-by-step with clients through the Score Report. Clients can take turns reading sections or discussing their feelings about their results. Another option is to work with your clients to help them decide whether they want to explore additional occupations using other Job Zones or other Interest Areas.

To help clients better understand their interest results, activities are presented below that you can incorporate into your vocational exploration program. These activities can be used in a group setting or individually by clients. You might decide to have clients work on some sections of the activities independently and on other parts in a group.

• Review IP items following scoring.

After scoring their IP, clients can go back and look at the work activity items for their Interest Areas. By reviewing the items, clients can see what they "Liked" and how those work activities relate to their interests. If clients are dissatisfied with their IP results, they can look at the items for the Interest Areas that they think might represent them better and determine why they didn't respond more positively to those items.

• Use different Job Zones and Interest Areas to explore careers.

Clients can try out other Job Zones and Interest Areas to explore careers. This can help them confirm their results (e.g., they can see that the other Interest Areas/Job Zones do not contain occupations that they wish to explore), or they might find Interest Areas/Job Zones that they do want to use to explore occupations. Finally, this activity can give them a broader picture of the world of work.

• Use O*NET OnLine to explore occupations.

Clients can explore particular occupations using **O*NET OnLine**, <u>http://www.onetcenter.org</u>. They can be directed to find other information about the occupation that supports their view that the occupation is indeed one that they should pursue further. They can also be instructed to find information that supports their view that a particular occupation is not right for them.

• Clients can try their results out.

Clients could visit an individual working in one of the occupations they are thinking of pursuing. They could actually see what the person does on the job. They can talk to the employees in the job to see what interests the employees have and how they compare to the clients'. You might want to have clients prepare a list of questions to ask employees.

If clients can't visit a person in the job, they could find a friend or relative in a job they wish to pursue. They could talk to the person and report back to the class:

- 1) what the person likes and dislikes about the job,
- 2) what the person does on the job, and
- 3) what the person's interests seem to be.
- Use America's Job Bank (AJB) and other sources to look for jobs.

AJB, which can be found on the Internet, <u>http://www.ajb.org</u>, helps clients to see the types of job openings that exist for occupations they have selected to explore. If clients do not have access to the Internet through their school or home, they can go to their local employment service office to gain access to AJB. Clients can also try to find their occupations in the classified section of a newspaper.

• Rate occupations using RIASEC.

Provide clients with a list of occupations. Have each client assign a RIASEC rating to each occupation. In a group, have clients discuss the characteristics about each job that caused them to assign their rating. This activity will help clients better understand the relationship between interests and the world of work. It will also encourage them to see how they can use their interests to explore careers.

• Identify other life activities that relate to interests.

Have clients list other activities that they participate in related to their interests. For example, to what clubs or teams do they belong? What activities do they like doing with family or friends? Are there particular school courses that they like? This activity will help clients better identify and understand their interests.

• Use America's Learning eXchange (ALX) to find courses related to occupations. ALX, which can be found on the Internet, <u>http://www.alx.org</u>, allows users to see training programs and courses available for the occupations they have chosen to explore. They also can learn about requirements for licensing or certification.

WHERE CAN I GET MORE HELP WITH USING THE O*NET INTEREST PROFILER?

For more information about the **O*NET Interest Profiler** and its Score Report, contact the National Center for O*NET Development:

Internet: http://www.onetcenter.org/

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DEVELOPMENT OF THE O*NET INTEREST PROFILER: An Overview

This part of the User's Guide presents a broad overview of the procedures implemented to develop the **O*NET Interest Profiler**. The information is provided at a fairly basic level of technical detail to give the wide range of users of the IP an introduction to the technical underpinnings of the instrument. It is important to have a fundamental understanding of the IP technical characteristics, so you can be comfortable with the psychometric qualities of the instrument and can use the IP in a manner that is most beneficial to your clients. The goals of the IP development project and the major instrument development phases are summarized in the following sections. To gain a more thorough understanding of the IP development, you can read the *Development of the O*NET Interest Profiler* (Lewis & Rivkin, 1999) and *O*NET Interest Profiler: Reliability, Validity, and Self-Scoring* (Rounds, Walker, Day, Hubert, Lewis, & Rivkin, 1999).

PRIMARY GOALS OF IP DEVELOPMENT

The IP was developed to serve a variety of programs within the employment and training community that are involved in providing career exploration and vocational counseling services to clients. Specifically, there were four primary goals that were considered in developing the IP:

- 1) Develop an instrument with strong technical characteristics that would provide clients with accurate and useful information.
- Develop a fair and unbiased instrument that would serve the needs of clients from a variety of ethnic, cultural, and socioeconomic backgrounds. Every effort was made to ensure that the instrument would be helpful to clients with different backgrounds.
- Develop an instrument that included items representing the entire world of work. This would help ensure that the instrument would provide useful information to individuals with different work-related goals and interests.
- 4) Develop an instrument that could be used as a self-assessment tool that individuals could self-administer, self-score, and self-interpret. This selfassessment instrument would help empower clients to take control of their career exploration efforts. Of course, the instrument also could be used by counselors with clients in a one-on-one or group setting.

These goals were considered in each of the research phases conducted to develop the IP. In the next section, each of these phases is introduced, and the procedures conducted are summarized.

O*NET INTEREST PROFILER DEVELOPMENT PHASES

Eight research phases were conducted in support of the development of the IP:

- 1) Review of existing DOL Interest Instruments,
- 2) Review/Revision/Tryout of Existing Items,
- 3) Taxonomy Development,
- 4) Placement of Retained Items/Creation of New Items,
- 5) Item Screening Process,
- 6) Item Tryout and Scale Development,
- 7) Format Design, and
- 8) Evaluation of Reliability, Validity, and Self-Scoring.

Each of these phases is briefly presented below. The purpose, major steps, and important outcomes are described. For more detailed technical information regarding the procedures used and the results of each phase, see the following technical reports: *Development of the O*NET Interest Profiler* (Lewis & Rivkin, 1999) and *O*NET Interest Profiler: Reliability, Validity, and Self-Scoring* (Rounds, Walker, Day, Hubert, Lewis, & Rivkin, 1999).

PHASE 1: REVIEW OF EXISTING DOL INSTRUMENTS

Before developing the **O*NET Interest Profiler**, existing DOL interest instruments (e.g, USES Interest Inventory, USES Interest Checklist, Job Search Inventory) were reviewed to determine if they were currently sufficient or could be easily updated to serve as DOL's primary interest instrument. The review indicated that all of the instruments had problems, including technical insufficiencies and outdatedness of items and format, that would make it difficult to "resurrect" any of them to serve the needs of the employment and training community. However, all of the instruments did have individual items that could be used as a starting point for the new DOL instrument, the **O*NET Interest Profiler**.

PHASE 2: REVIEW/REVISION/TRYOUT OF EXISTING ITEMS

The purpose of this phase was to review items from existing DOL instruments and to consider them for possible inclusion in the new instrument. From a pool of 453 existing items, 281 were retained, and an additional 288 new items were generated based on the content of existing items. These 569 items were included in a pilot test with individuals from a variety of backgrounds (e.g., age, education, race, socioeconomic, gender) to examine endorsement rates. Items with low endorsement rates were dropped, as well as items with duplicate content, resulting in a pool of 532 items.

PHASE 3: ITEM TAXONOMY DEVELOPMENT

A taxonomy was created to provide structure to the process of developing and selecting items for the IP, helping ensure that a variety of items representing the world of work would be included in the final instrument. Once the taxonomy was developed, the pool of items generated from Phase 2 would be placed into the structure. Then, areas within the taxonomy that did not have enough items would be identified, indicating that new items would have to be developed.

The six RIASEC constructs served as the over-arching structure of the taxonomy. Within each RIASEC construct, work content areas were identified. These areas were derived from the 66 work groups contained in the *Guide for Occupational Exploration* (GOE; U.S. Department of Labor, 1979a), which is very representative of the world of work. Each of the 66 areas was assigned to one of the six RIASEC categories, based on expert judgements. Additionally, with each RIASEC construct, five levels of training requirements were identified to help ensure that items were developed that represent the variety of complexity in the world of work. The training levels were a modified form of the Specific Vocational Preparation Scale (SVP; U.S. Department of Labor, 1991b), which focuses on the amount of time required to learn the techniques, acquire the information, and develop the skills to perform a job. The Modified Specific Vocational Preparation Scale is presented in Figure 2. Lastly, based on a literature review and on the purpose of the IP, description of work activities was selected as the type of item to be developed.

Item development targets for the taxonomy were set at a minimum of 100 items per RIASEC construct, with equal representation for each work content area. These numbers were set fairly high because it was estimated that a large number of items would fail to pass a variety of later development phases (e.g., item screening and item tryout).

PHASE 4: PLACEMENT OF RETAINED ITEMS/CREATION OF NEW ITEMS

Placement of Items

Each of the 532 items in the pool, derived from the initial pilot study conducted during Phase 2, was placed within the taxonomy. A team of four judges was trained in Holland's (1985a) vocational personality theory and the taxonomy.

Judges reviewed the items and independently assigned them to one of the work content areas within a RIASEC construct. Assignment disagreements were flagged, discussed, and resolved. After the placement of the items was complete, the coverage of the taxonomy was examined. Areas that did not have enough items to meet the taxonomy targets were identified for new item development.

Development of New Items

A team of four item writers was trained in Holland's (1997) vocational personality theory and the taxonomy. Each item writer was requested to write new items that met the following criteria:

- 1) filled in areas of the taxonomy that did not meet minimum goals;
- 2) were descriptions of work activities;
- increased the representation of training-level requirement found within the RIASEC construct;
- 4) were inoffensive to individuals and subgroups;
- 5) contained vocabulary comprehensible to individuals with an eighth grade reading level;
- 6) would elicit an endorsement rate that falls between 10 percent and 90 percent;
- would likely reduce spurious gender and race/ethnic endorsement rate differences; and
- 8) would be familiar to individuals from a variety of settings, including:
 - a) entry level and career transition counseling settings;
 - b) urban, rural, and suburban settings; and
 - c) nationwide regional settings.

All new items were reviewed and edited by the team of item writers.

Pilot Study

A total of 272 new items was developed, resulting in a pool of 804 items (532 items from Phase 2 plus 272 new items). These items were included in a small pilot test with individuals from a variety of backgrounds (e.g., age, education, employment status). Items with extreme means, large gender differences, or large race/ethnic differences were removed. Priority was placed on eliminating items with similar or duplicate content. After this phase, a pool of 776 items existed.

PHASE 5: ITEM SCREENS

The pool of 776 items underwent a comprehensive screening process designed to remove items that failed to meet the rigorous standards for inclusion in the **O*NET Interest Profiler**. Each item was required to pass the seven screens presented below to be included in the next phase of the instrument development.

Retranslation

This screen was conducted to ensure that items truly represented their intended RIASEC construct. Five expert judges in Holland's (1985a) vocational personality theory received a pool of items with no indication of the construct or work content area each item was intended to represent. Judges independently assigned each item to a RIASEC construct. Following the assignment task, judges discussed assignment differences, recommended item alterations, and finalized all ratings. Items were retained for which at least four of the five judges agreed on assignment.

Sensitivity

The purpose of this screening was to ensure that items would not be offensive to particular segments of the potential user population. A panel of six individuals representing diverse race/ethnic and gender groups was convened. The protocol for the screen was derived from guidelines developed by the Educational Testing Service (1987), along with a review of the sensitivity procedures used in the development of the **O*NET Ability Profiler** (Mellon, Daggett, MacManus, & Moritsch, 1996).

Panel members reviewed each item for possible bias against or offensiveness to racial, ethnic, or gender groups. The panel concluded with a list of suggested item revisions and deletions that were incorporated within the item pool.

Comprehensibility

The estimated range of education for potential clients of the **O*NET Interest Profiler** begins at the junior high school level; thus, items must be comprehensible to these users. An eighth grade reading level was selected as the goal for the items. *The Living Word Vocabulary* (Dale & O'Rourke, 1981) was used to determine the grade level appropriateness of the vocabulary present in each item. Two sets of inspectors independently identified the grade level assigned to all words present in the pool of items.

All items with words exceeding an eighth grade level were identified. For each of these items, one of the following actions was taken:

- 1) inappropriate grade-level words were replaced with synonyms with a lower grade-level designation,
- 2) items were entirely rewritten, or
- 3) alterations of the items were overruled by a team of four judges.

Familiarity

The work activities described by the items within the final version of the instrument should be recognizable (i.e., familiar) to the entire range of potential clients served by DOL umbrella agencies and initiatives. Eight focus groups were conducted in four regions of the country to determine if the items were indeed recognizable by different segments of the ETA client community. The groups were drawn from employment service offices, community colleges, and technical/trade schools located in urban, suburban, and rural sites. A total of 254 individuals from a variety of backgrounds (e.g., age, education, employment status) participated. Each participant rated the familiarity of the work activities. Items that individuals were not able to recognize were eliminated.

Training Requirement

This screening was conducted to ensure that items represented the broad range of training requirements specified by the taxonomy. Occupational analysts with expert knowledge of the Specific Vocational Preparation scale (SVP; U.S. Department of Labor,1991b) were trained on the use of the Modified SVP scale (see Phase 3 for a description). Each analyst rated the amount of vocational training required to perform the work activity described by the items. The rating of training level was used to remove items from areas of the taxonomy that were over-represented (i.e., work content areas). The goal was to maximize the variety of training levels represented by items within each RIASEC construct.

Duplication

The purpose of this screening was to eliminate items with identical or nearly identical content. A team of inspectors reviewed the pool of items to ensure that nearly identical work activities were not present. For example, "type a memo" and "type a letter" would be considered nearly identical, and only one would be retained.

Copyright

To avoid copyright infringement, potential IP items were compared to items widely used in existing interest instruments. Items were compared with those in the 1) Interest-Finder (U.S. Department of Defense, 1995), 2) Self-Directed Search (Holland, 1985b), 3) Strong Interest Inventory (Hansen & Campbell, 1985), and 4) UNIACT-R (American College Testing Program, 1995). Two inspectors independently identified duplicate and near duplicate items. Agreement between the inspectors was extremely high, with the few discrepancies being resolved by the team of inspectors. All items that represented potential copyright infringements were removed.

PHASE 6: ITEM TRYOUT AND SCALE DEVELOPMENT

A total of 226 items failed to pass the seven-stage screening process, resulting in a pool of 500 items. A large scale study was conducted to gather information on the psychometric characteristics of the 500 items left in the tryout pool. This information would serve to identify those items most likely to constitute an **O*NET Interest Profiler** with high reliability, low gender and race/ethnic biases, and strong evidence of construct validity. In addition, the Interest-Finder (Defense Manpower Data Center, 1995) was administered to allow for a comparison between the newly created **O*NET Interest Profiler** and an established interest instrument. The Interest-Finder is a vocational interest assessment instrument developed by the Defense Manpower Data Center for use in the ASVAB Career Exploration Program, a national testing program used annually in more than 16,000 schools across the United States.

Sampling Plan

The sampling plan for this study attempted to target groups of clients most likely to use the **O*NET Interest Profiler** upon its completion. Groups identified included: 1) unemployed workers, 2) junior college and technical/trade school clients, 3) high school clients, 4) college clients, and 5) workers in transition (employed workers looking for different jobs/careers). The sampling plan also called for a high proportion of minority participants, an equivalent number of participants from each gender, and participants drawn from a variety of regions across the United States.

Participants

Data collection sites included employment service offices, high schools, junior colleges, technical/trade schools, universities, and other government agencies located in six states across the country (Florida, Michigan, New York, North Carolina, Texas, and Utah). A total of 1,123 participants provided useable responses. The sample consisted of approximately equal numbers of males and females, a high degree of ethnic diversity, a broad distribution of age groups, and represented a variety of education and employment situations.

Procedures

Participants were administered, in a counterbalanced fashion, an **O*NET Interest Profiler** and an Interest-Finder. The **O*NET Interest Profiler** consisted of 500 tryout items. In addition, each participant completed a brief demographics questionnaire, along with a comment sheet eliciting feedback regarding the **O*NET Interest Profiler**.

Item Analyses

A set of general item-level screens were conducted to eliminate items with extremely low and high endorsement rates, items with large differences in endorsements between males and females, items with large differences among racial/ethnic groups, and items that did not correlate highly with their intended scale. An item pool of 461 items was retained after these screens.

Scale Analyses

The purpose of this stage of the analyses was to select from the pool of items a total of 180 items that would create six internally consistent scales which would:

- 1) demonstrate strong conformity to the hexagonal model of Holland's (1985a) theory of vocational interests,
- 2) contain maximum training level and occupation representation, and
- 3) minimize gender and race/ethnic endorsement rate differences.

Based on their correlations with the six RIASEC scales, items were rank ordered in terms of their conformity to the structure of the hexagonal model. The structure specifies that an item should correlate most highly with its target scale (i.e., the scale it was intended to measure), next strongest with its adjacent scale, less strongly with its alternative scales, and least strongly with its opposite scale (for an overview of the Holland Model, see the **Interpretation Section** of this Guide).

Items were eliminated if they correlated less with their target scale than with another scale. Then, four judges with psychometric backgrounds, as well as training in Holland's (1985a) vocational theory and the **O*NET Interest Profiler** taxonomy, independently made qualitative selection judgements based on the following information:

- 1) item-to-scale correlations,
- 2) gender and race/ethnic endorsement rate differences,
- 3) training level requirement ratings, and
- 4) work content area assignments.

Judges discussed their respective selections and agreed on an initial selection of 30 items per scale.

Finally, starting with the initial 30-item scales, different item combinations within scales were examined to maximize the empirical relationships of items within scales, as well as to minimize the relationship of each item with non-target scale totals. For example, an item was replaced if its removal significantly increased the scale's internal reliability.

Characteristics of Scales/Instrument

Six scales composed of 30 items each were finalized. Descriptions of the scales and instrument are provided in the following sections.

Taxonomy Coverage

An extremely wide representation of work activities was achieved. One or more items were present in approximately 80% of the work content areas of the taxonomy.

Large differences in the average level of training requirement for each scale existed. Differences in scale training levels may be due to inherent characteristics of the RIASEC constructs themselves. However, the number of training levels within each scale with a minimum of one item was high. In addition, the instrument as a whole had good representation of each training level.

Psychometric Characteristics

All six scales demonstrated a high degree of internal reliability, with coefficient alphas ranging from .95 to .97. The mean, standard deviation, coefficient alpha, and scale intercorrelations for the **O*NET Interest Profiler** and Interest-Finder are reported in Table 1. The rank order of the scale means for the two measures are quite different (e.g., the Enterprising Scale is ranked fourth in the **O*NET Interest Profiler**, while it is ranked first in the Interest-Finder). Possible explanations for these differences include a varying degree of training level/complexity between the two instruments and format differences, such as:

- a) presence of construct labels and definitions;
- b) use of different item types (e.g., work activity statements versus activities, training, and occupational titles);
- c) response format differences; and
- d) scale format differences.

Although differences exist between the **O*NET Interest Profiler** and the Interest-Finder, examination of the instruments' scale intercorrelations reveals a very high correlation between corresponding scales, ranging from .71 (Enterprising) to .86 (Conventional), with a median value of .82. Correlations between **O*NET Interest Profiler** scales and noncorresponding Interest-Finder scales were much lower, ranging from .30 (IP Social and IF Realistic, IP Conventional and IF Realistic) to .62 (IP Enterprising and IF Social), with a median value of .46. Overall, the correlational relationships between the two instruments provide evidence of both convergent and discriminant validity.

Gender and Race/Ethnic Bias

In an attempt to reduce the likelihood of the **O*NET Interest Profiler** leading to restrictive career options for particular subgroups, an effort was made to select items with similar endorsement rates between groups (e.g., male and female). It was important to evaluate the extent to which efforts at the item level transferred into results at the scale level. A "balanced" scale indicates that the proportion of people from two sub-groups who endorse a scale is relatively similar.

For both the **O*NET Interest Profiler** and Interest-Finder, raw score means of subgroups were examined. Gender balance was evident in both instruments, with the exception of the Realistic Scale. For both instruments, a dissimilar proportion of males were likely to endorse the items within the Realistic Scale. The lack of balance for the Realistic Scales may be reflective of the traditional gender differences that exist within our society.

Balance between White Non-Hispanics and African Americans was evident in both measures, with the exception of the **O*NET Interest Profiler's** Enterprising Scale. For this scale, a higher proportion of African Americans were likely to endorse the items within the Enterprising Scale. Higher mean scale scores for African Americans also existed in many of the other scales, (e.g., IF Conventional, IP Social, IF Enterprising, IP Conventional, IF Social), indicating an overall positive response bias. In terms of career counseling, the ramifications of this occurrence appear to be minimal, with African Americans indicating stronger preference for all six RIASEC Interest Areas. Balance between White Non-Hispanics and Hispanics was evident in both measures.

PHASE 7: FORMAT DESIGN

The goals of the format design of the **O*NET Interest Profiler** were to develop an instrument that:

- 1) could be reliably hand-scored by clients taking the instrument on their own;
- would gather information necessary to produce accurate, reliable interest profiles;
- 3) would allow for review of work activities within a RIASEC Interest Area once the instrument was completed; and
- 4) would lend itself to an equivalent computerized form.

Item Response Format

Several different item response formats were considered. The following 3-point response format was selected: *Like*, *Unsure*, *Dislike*. This format was seen as advantageous for three primary reasons:

- 1) The format was well suited for hand scoring. Participants are responsible simply for adding up the number of *Likes*.
- 2) The *Unsure* choice was viewed as an important option. An *Unsure* response is a meaningful option for clients who are not certain whether or not they like or dislike a particular work activity. However, the inclusion of this response in the scoring system would make self-scoring of the paper-and-pencil version of the IP difficult. Thus, the *Unsure* choice is not "scored."
- 3) This item format maintains continuity with the formats of existing DOL interest instruments, allowing for a smoother transition for those agencies currently using DOL instruments.

Instrument Layout

A wide variety of item layouts was explored. The final layout is a presentation of 15 columns of 12 interest items. Within each column, sets of items representing one of the interest constructs are presented in the following order: Realistic, Investigative, Artistic, Social, Enterprising, Conventional. Horizontal color bands distinguish the

items representing each RIASEC construct. The color bands serve to aid in the scoring of the instrument, as well as allow clients to go back and review the work activity statements within a particular RIASEC construct once they have completed the instrument. In addition, items representing the same scale are not all presented together. This format is likely to reduce a general response bias (i.e., the endorsement of the items of an Interest Area in a particular fashion based on an initial impression or tendency).

Client Feedback on Instrument Layout

A small pilot test was conducted to evaluate individuals' ability to understand and score the **O*NET Interest Profiler**. In addition, two sets of scoring directions containing different emphases on visual instructions were tested.

A total of 80 individuals from a variety of backgrounds (e.g., age and employment status) participated in the pilot. Individuals with lower education levels were purposely over-sampled in an attempt to create a more rigorous test of the instrument's directions and scoring procedures. There was, however, a very low representation of minority groups.

Participants completed one version of the **O*NET Interest Profiler** (i.e, Nonvisual Instruction or Visual Instruction) along with a brief demographics questionnaire. In addition, they filled out a questionnaire eliciting feedback about their understanding of the instrument, the process they followed to score the instrument, and their overall impression of the instrument. After completing the instrument, individuals participated in focus group discussions, enabling more qualitative information to be gathered.

Differences in scoring error rates between the two forms of the instrument were negligible. In addition, feedback generated from the questionnaire revealed little difference between the two forms. Information gathered from focus groups did reveal, however, that some participants relied on the visual directions to understand the instrument, while others found them distracting. Based on the feedback from the pilot study, a new version of the **O*NET Interest Profiler** was created which placed a "middle of the road" emphasis on visual directions.

Regardless of the version of the instrument they were administered, participants provided overwhelmingly positive feedback related to **O*NET Interest Profiler**, with 89% of the participants expressing a desire to take the instrument again when its development is complete, and 81% stating they would recommend the instrument to their friends.

PHASE 8: EVALUATION OF RELIABILITY, VALIDITY, AND SELF-SCORING

A large-scale study was conducted to examine the psychometric properties reliability and validity—of the final form of the instrument, as well as to evaluate the self-scoring aspect of the instrument. The study required gathering information from three groups of individuals with diverse backgrounds.

Participants and Design

The majority of the data were gathered from 1,061 individuals from employment service offices, junior colleges, trade schools, and other government agencies located in four regions across the United States: Michigan, New York, North Carolina, and Utah. These participants were administered the **O*NET Interest Profiler** and the Interest-Finder in a counter-balanced fashion (see Item Tryout and Scale Development for brief overview). Clients were administered a non-scoring version of one of the instruments first, followed by a version that they would score. This was done so that the actual scoring and interpretation of the first instrument would not bias the responses to the second measure.

Two groups of individuals also participated in the test-retest portion of the study. Junior college/vocational students and college students were administered one of the instruments on two separate occasions, with approximately one month elapsing between the two administrations. The **O*NET Interest Profiler** was administered twice to 132 participants, and the Interest-Finder was administered twice to 120 participants.

Self Scoring

The innovative self-administering, self-scoring format of the **O*NET Interest Profiler** was supported. The results indicated that the format (i.e., items of each Interest Area presented to clients in a mixed fashion, rather than grouped together by Interest Area) reduced the presence of a general response bias found in interest assessment inventories (see the Format Design section of this Guide for a brief discussion). An examination of clients' ability to self-score the instrument revealed a low percentage of scoring errors and, more importantly, a minimal presence of individuals identifying the wrong top interest due to scoring errors. Participants viewed the instrument as easy to score, interesting, and beneficial.

Reliability

The internal consistency estimates across all the RIASEC scales were very high (ranging from .93 to .96), indicating that each of the scales "hangs together" well. The instrument also had a high estimate of test-retest reliability (ranging from .81 to .92), providing evidence that clients' scores are likely to be similar if the instrument is taken more than once within a short period of time.

Validity

Similarities to the Interest-Finder provided evidence of convergent validity for the **O*NET Interest Profiler**. A principal components analysis indicated that the two instruments had similar factor structures. Equivalent scales from both measures were highly correlated, also supporting the convergent validity of these measures.

According to the Holland model, however, the correlations for the **O*NET** Interest Profiler suggest a problematic Enterprising scale, because this scale correlates too highly with the Artistic scale and not highly enough with the Social scale. There was also a large difference in the mean Enterprising scores for the two measures. Although Interest-Finder items focus on high-level business and law activities, **O*NET Interest Profiler** items include many low-level sales jobs in an attempt to cover all prestige and education levels. Preliminary analyses indicate that these low training level items are not consistently perceived as Enterprising activities by assessment takers. The **O*NET Interest Profiler** introduces more variability into the Enterprising Interest Area and perhaps, in the process, loses conceptual unity. Nevertheless, it is important to keep in mind that these results are based on comparisons with the Interest-Finder. Comparisons to another RIASEC instrument may lead to different conclusions.

Also, according to the Holland Model (Holland, 1985a), both of the instruments exhibited a gap between the Realistic and Conventional Interest Areas (i.e., correlation between the two scales was too small). The presence of this gap has also been found in data from other Holland-type measures. Whether the Realistic-Conventional gap reflects the nature of vocational interest structure or a choice of items within the scales is still unknown.

Note: For more detailed information on the reliability and validity of the IP, please see *O*NET Interest Profiler: Reliability, Validity, and Self-Scoring* (Rounds, Walker, Day, Hubert, Lewis, & Rivkin, 1999).

SUMMARY

The procedures followed to develop the **O*NET Interest Profiler** produced an easyto-use, technically sound instrument. The IP is a reliable, valid self-assessment tool, that provides information about an individual's work-related interests that many types of clients within the employment and training community can use to explore the world of work. The IP can be used in conjunction with other assessment tools (e.g., **O*NET Ability Profiler, O*NET Work Importance Profiler,** or other privately developed instruments) to provide "whole-person assessment" services to clients involved in career exploration. Clients can link IP results to occupations included in **O*NET OnLine**. **O*NET OnLine** will allow clients to thoroughly explore a variety of occupations, allowing the consideration of these occupations as possible career choices.

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TABLES

Table 1

Interest Profiler and Interest-Finder Scale Means, Standard Deviations, Coefficient Alphas, and Scale Intercorrelations

RIASEC Scale2	M3	SD	8	IP-R	I-dI	A-41	IP-S	IP-E	IP-C	IF-R	IF-I	IF-A	IF-S	IF-E	IF-C
IP-R	10.32 (6)	8.7	.95	 	.56	.38	.40	.59	.39	<u>.83⁴</u>	.49	.39	.41	.44	.40
I-1I	13.19 (5)	8.9	.95		 	.56	.57	.52	.43	.50	.80	.56	.59	.56	.40
IP-A	13.46 (3)	9.2	96.			 	.52	.58	.35	.34	.44	.84	.57	.53	.32
IP-S	16.28 (1)	9.5	96.				 	.62	.49	.30	.39	.49	<u>79</u>	.49	.44
IP-E	13.28 (4)	8.7	.95					 	.66	.47	.39	.53	.62	.71	.61
IP-C	14.80 (2)	10.1	.97						 	.30	.35	.37	.52	.54	<u>.86</u>
IF-R	17.1 (6)	11.3	.95							 	.56	.42	.40	.46	.37
IF-I	19.4 (4)	12.2	96.								 	.53	.53	.54	.40
IF-A	18.6 (5)	11.3	.95									 	.64	.59	.41
IF-S	21.8 (2)	11.4	.95										 	.67	.57
IF-E	22.3 (1)	11.5	.95											 	.62
IF-C	21.2 (3)	13.3	.97												

5

IF-E Enterprising scale, IF-C = Conventional scale. All means, standard deviations, coefficient alphas, and scale intercorrelations are based on a sample size of 1,123. IP scale scores range from 0 - 30. IP-E=Enterprising scale, IP-C=Conventional scale, IF-R=Realistic scale, IF-I=Investigative scale, IF-A=Artistic scale, IF-S=Social scale, IF scale scores range from 0 - 40.

² All correlation coefficients are statistically significant beyond the .001 level.

³ Numbers in parentheses following the scale means are the within-measure rank order position of the mean.

⁴ Correlations between corresponding IP and IF scales are underscored for interpretation purposes.

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	Males	SC	Females	ıles		Males	les	Females	ıles	
Scale	Mean	SD	Mean	SD	Oa	Mean	SD	Mean	SD	Oa
Realistic	13.78	8.82	7.24	7.33	68*	21.83	10.50	12.91	10.50	66*
Investigative	14.29	8.91	12.20	8.73	90	22.07	12.25	17.10	11.61	83
Artistic	13.34	8.93	13.56	9.39	66	18.32	11.37	18.78	11.30	98
Social	14.79	9.61	17.61	9.16	89	20.78	11.91	22.63	10.94	93
Enterprising	13.62	8.79	12.99	8.65	98	23.70	11.22	20.98	11.58	90
Conventional	13.02	9.93	16.38	10.03	86	19.76	13.31	22.52	13.15	91
	-	F CC - C	Ē			-	-			

Note: O*NET Interest Profiler scale scores range from 0 to 30; Interest-Finder scales range from 0 to 40. All means and standard deviations are based on a sample size of 1123. ^a Percent overlap is based on Dunnette's (1966) table for Tilton's (1937) measure of overlap. * Overlap less than or equal to 75%, indicating dissimilar distributions. ** Overlap less than 81%, but greater than 75%, indicating somewhat dissimilar distributions.

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	Non-Hispanic	ispanic	American	ican		Non-H	Non-Hispanic	American	ican	
Scale	Mean	SD	Mean	SD	O^{a}	Mean	SD	Mean	SD	Oa
Realistic	8.65	7.93	11.77	8.99	85	15.13	10.56	18.57	11.38	87
Investigative	12.28	8.72	12.76	8.74	97	17.73	11.91	19.50	12.30	94
Artistic	11.60	9.09	15.10	9.04	84	16.03	11.21	20.36	11.19	84
Social	12.95	9.55	18.31	8.63	76**	18.06	10.86	23.69	11.38	80**
Enterprising	9.98	7.71	16.46	8.78	69*	18.81	10.95	24.84	11.26	78**
Conventional	12.16	10.11	17.30	9.61	79**	17.51	13.16	25.20	12.33	76**
		T OC T O		c						

Note. O*NET Interest Profiler scale scores range from 0 to 30; Interest-Finder scales range from 0 to 40. All means and standard deviations are based on a sample size of 1123. ^a Percent overlap is based on Dunnette's (1966) table for Tilton's (1937) measure of overlap.

* Overlap less than or equal to 75%, indicating dissimilar distributions. ** Overlap less than 81%, but greater than 75%, indicating somewhat dissimilar distributions.

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	Non-Hispanic	ispanic				Non-H	Non-Hispanic			
Scale	Mean	SD	Mean	SD	O^{a}	Mean	SD	Mean	SD	Qa
Realistic	8.65	7.93	10.47	9.01	91	15.13	10.56	17.15	11.87	92
Investigative	12.28	8.72	14.83	9.12	88	17.73	11.91	21.08	12.10	88
Artistic	11.60	9.09	13.41	9.08	92	16.03	11.21	18.83	11.17	90
Social	12.95	9.55	17.98	9.22	78**	18.06	10.86	23.58	11.04	80**
Enterprising	9.98	7.71	13.11	8.28	84	18.81	10.95	22.72	11.44	86
Conventional	12.16	10.11	14.54	10.05	90	17.51	13.16	19.96	13.40	92
More. O*NET Interest Profiler scale scores range from 0 to 30: Interest-Finder scales range from 0 to 40. All means and standard deviations are based on a sample size of 1123.	ale scores range	trom 0 to 30: I	Interest-Finder sca	les range from () to 40. All means	and standard deviati	ions are based on a	samnle size of 112		

Ç. 1 * Overlap is based on Dunnette's (1966) table for Tilton's (1937) measure of overlap. * Detect overlap is based on Dunnette's (1966) table for Tilton's (1937) measure of overlap. * Overlap less than or equal to 75%, indicating dissimilar distributions. ** Overlap less than 81%, but greater than 75%, indicating somewhat dissimilar distributions.

FIGURES

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Overview of the Interest Profiler Taxonomy, Version 3.0

	Realistic Scale		Investigative Scale		Artistic Scale
03.01# 03.02# 03.04#	Plants & Animals Level 3 " Level 2 " Level 1	02.01 02.02	Physical Sciences Life Sciences	01.01 01.02	Literary Arts Visual Arts
03.03	Animal Training & Service	02.03	Medical Sciences	01.03	Performing Arts: Drama
04.02	Security Services	02.04	Laboratory Technology	01.04	Performing Arts: Music
05.04#	Airplane & Ship Operation	02.05+	02.05+ Computer Technology	01.05	Performing Arts: Dance
05.05*	Craft Technology	05.01	Engineering	01.06	Craft Arts
05.06	Systems Operations	05.02#	Mechanical Systems Management	01.08	Modeling
05.07	Quality Control: Mechanical	05.03*	Engineering Technology	12.02	Physical Feats
05.08	Land & Water Vehicle Operation	11.01^{*}	11.01* Mathematics & Statistics		
05.10^{*}	Crafts	11.03	Social Research		
05.11	Equipment Operation	11.06A+	11.06A+ Finance: Design & Interpretation		
05.12#	Basic Mechanical	11.08	Communications		
06.01	Production Technology	11.10 12.00+	Regulations Enforcement General Research		
06.02# 06.04#	Production Work Level 2 " Level 1	4.01 R	Safety & Law		
06.03	Quality Control: Industrial				
09.03	Passenger Services				
09.04#*	Basic Services				

R Moved Post Retranslation Screen + New Work Content Area * GOE Work Group Definition Modified # GOE Work Group Title Modified

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Overview of the Interest Profiler Taxonomy, Version 3.0

	Social Scale		Enterprising Scale		Conventional Scale
04.01	Safety & Law Enforcement	08.01	08.01 Sales Technology	05.09*	05.09* Material Control
09.01	Hospitality Services	08.02	General Sales	07.01	Administrative Detail
09.02	Barber & Beauty Services	08.03	Vending	07.02	Mathematical Detail
10.01	Social Services	.06.05	09.05#* Attendant/Customer Services	07.03	Financial Detail
10.02	Nursing, Therapy, & Specialized Teaching Services	11.04 11.05	Law Business Administration	07.04 07.05	Oral Communications Records Processing
10.03^{*}	Child & Adult Care	11.06B-	11.06B+ Finance: Buy & Sell	07.06	Clerical Machine Operation
11.02	Educational & Library Services	11.07	11.07 Service Administration	07.07	Clerical Handling
12.01	Sports	11.09	Promotion	2.05 R	Computer Technology
		11.11	Business Management		
		11.12	Contracts & Claims		
		9.02 R	9.02R Barber & Beauty Services		

R Moved Post Retranslation Screen # GOE Work Group Title Modified + New Work Content Area * GOE Work Group Definition Modified

Figure 2

Overview of the Modified Specific Vocational Preparation Scale (MSVP)

Time⁵ Level

- Up to and including 6 months.6 - U M 4 U
- Over 6 months up to and including 1 year. Over 1 year up to and including 2 years. Over 2 years up to 4 years. At least 4 years.⁷

Note: The levels of this scale are mutually exclusive and do not overlap.

⁵ Time that applies to General Educational Development is not considered in estimating Specific Vocational Preparation.

 $^{^6}$ Represents three collapsed levels of the original SVP scale. 7 Represents two collapsed levels of the original SVP scale.

Figure 3

Familiarity Screen Rating Scale

Not Familiar		Somewhat Familiar		Very Familiar
1	2	3	4	5
You don't know what the activity is. You have never heard of the activity.		You know something about the activity, or someone you know performs the activity on his or her job.		You have seen the activity performed a number of times, or you have performed the activity yourself.