This document is intended to help those who provide assistance for career decision making in Wisconsin to incorporate labor market information in their work with clients. The topics covered are as follows: (1) career decision making; (2) what labor market information is, including occupational descriptions and information on wages, hours, fringe benefits, employment trends, entry qualifications, advancement opportunities, education and training programs, the expected impact of technology, military training, and occupational characteristics; (3) how to use labor market information; (4) why counselors and others should use it; (5) where labor market information can be found, such as in the Wisconsin Career Information System (WCIS) and local, state, and national sources; and (6) how counselors and others can use labor market information. Twelve sample cases are used in the last chapter. The four appendices contain an annotated guide to using the WCIS for occupational and educational information, a developmental guidance model, a glossary of employment information terms, and an annotated guide to using periodical labor market information publications.

(CML)
This document has been reproduced received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED TO THE EDUCATIONAL RESOURCE INFORMATION CENTER (ERIC)."
Using Labor Market Information for Career Decision Making
A Handbook for Career Information Providers

published by Wisconsin Career Information System

by Roger Lambert
Nancy Howard
Patricia Waldren

1987

Portions of this work have been edited from the publication Career Decision Making Using Labor Market Information written by H. B. Gelatt and Albert T. Tokuno
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>iii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iv</td>
</tr>
<tr>
<td><strong>1. Introduction</strong></td>
<td></td>
</tr>
<tr>
<td>Using the Handbook</td>
<td>1</td>
</tr>
<tr>
<td>Developmental Guidance</td>
<td>2</td>
</tr>
<tr>
<td><strong>2. Career Decision Making: Ready, Aim, Hire!</strong></td>
<td></td>
</tr>
<tr>
<td>Successful Career Counseling</td>
<td>4</td>
</tr>
<tr>
<td>Career Decision Making Framework</td>
<td>6</td>
</tr>
<tr>
<td><strong>3. What is Labor Market Information and How is It Used?</strong></td>
<td></td>
</tr>
<tr>
<td>Occupational Descriptions</td>
<td>8</td>
</tr>
<tr>
<td>Wages, Hours and Fringe Benefits</td>
<td>8</td>
</tr>
<tr>
<td>Employment Trends and Outlook</td>
<td>9</td>
</tr>
<tr>
<td>Method of Entry/Qualifications</td>
<td>9</td>
</tr>
<tr>
<td>Advancement Opportunities</td>
<td>10</td>
</tr>
<tr>
<td>Education and Training Programs</td>
<td>10</td>
</tr>
<tr>
<td>Future Impact of Technology</td>
<td>11</td>
</tr>
<tr>
<td>Military Training and Employment</td>
<td>11</td>
</tr>
<tr>
<td>Type of Industry or Business</td>
<td>12</td>
</tr>
<tr>
<td>Educational Program Classification System</td>
<td>12</td>
</tr>
<tr>
<td>Occupation Classification Systems</td>
<td>13</td>
</tr>
<tr>
<td>Occupational Characteristics</td>
<td>13</td>
</tr>
<tr>
<td><strong>4. Why Use Labor Market Information?</strong></td>
<td></td>
</tr>
<tr>
<td>Bias and Barriers</td>
<td>18</td>
</tr>
<tr>
<td>Everyone has Labor Market Information</td>
<td>19</td>
</tr>
<tr>
<td>Information vs. Values</td>
<td>20</td>
</tr>
<tr>
<td>Getting Your Labor to Market</td>
<td>20</td>
</tr>
<tr>
<td><strong>5. Where to Find Labor Market Information</strong></td>
<td></td>
</tr>
<tr>
<td>Wisconsin Career Information System</td>
<td>21</td>
</tr>
<tr>
<td>Local Sources</td>
<td>22</td>
</tr>
<tr>
<td>State and National Sources</td>
<td>23</td>
</tr>
<tr>
<td><strong>6. Using What You Know</strong></td>
<td></td>
</tr>
<tr>
<td>Twelve Sample Cases</td>
<td>33</td>
</tr>
<tr>
<td>Epilogue</td>
<td>53</td>
</tr>
<tr>
<td>Appendix A</td>
<td>55</td>
</tr>
<tr>
<td>Annotated Guide to Using WCIS for Occupational and Educational Information</td>
<td>71</td>
</tr>
<tr>
<td>Appendix B</td>
<td></td>
</tr>
<tr>
<td>Developmental Guidance Model</td>
<td>81</td>
</tr>
<tr>
<td>Appendix C</td>
<td></td>
</tr>
<tr>
<td>Glossary of Labor Market Information Terms</td>
<td>85</td>
</tr>
<tr>
<td>Appendix D</td>
<td></td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

In preparing this handbook it was readily apparent that many people were highly interested in it and subsequently made significant contributions in ideas and suggestions. First of all, the work done by H.B. Gelatt and Albert T. Tokuno, who prepared a similar handbook for the California Occupational Information System, needs to be recognised. It was their work that has provided a basis for our handbook. We have gratefully used their work with permission of the California Occupational Information System and we would like to extend to them our appreciation. Beyond this many people in our state made substantial input, contributing their time, energy and financial support. We wish to thank the Wisconsin Occupational Information Coordinating Council (WOICC) for encouraging us to proceed on this project and in providing a portion of the funding for it. Also in the same vein we wish to extend our gratitude to the Bureau for Vocational Education, Wisconsin Department of Public Instruction for their encouragement and financial support for the development of this handbook. We also acknowledge the many users of the Wisconsin Career Information System who through their consortium membership fees have helped to support this project. This financial support and agency encouragement paved the way for content development. In one way or another each has made an impact on the final product. We wish to thank them and hereby acknowledge their advice and counsel. Members of the Advisory Committee include:

Barb Bitters, DPI  
Dick Dignan, DPI  
Bob Enghagen, DPI  
Wayne Sherry, DPI  
Pam Wilson, DPI  

Frans Backus, DILHR  
Jim Jackson, DILHR  
Jerry Snow, DILHR  
Janet Pugh, DILHR  

Lorran Celley, VTAE  
Gary Denis, SDA-Marathon  
Carlyle Gilbertsen, UW-Stout  
Mike Irwin, SDA-Wis Rapids  
Sue Kell, Div. of Voc Rehab  
Mike Klienz, UW-Milwaukee  

Jim Leffin, Wausau School Dist.  
Herb Mehne, LVEC-Menomonie Sr. H. S.  
Karen Roberts, MATC-Madison  
Herb Schneider, LVEC-Sheboygan  
Paul Voss, UW-Madison  
Sally Ward, Whitewater H.S.
DEDICATION

This handbook is dedicated to the memory of Jerome Henning. Jerry was a staunch supporter of career guidance at all levels of education. His dedication as a school counselor and as a Department of Public Instruction consultant for career guidance was well known among colleagues in Wisconsin and nationally. He was instrumental in initiating the development of this book and provided considerable input and ideas which were included. As chairperson of the Policy Advisory Council of the Wisconsin Career Information System and as an active leader in professional guidance and career education associations, Jerry's enthusiasm, friendly smile and winning attitude touched many of our lives.

While Jerry is no longer with us, we have his ideas and his spirit. With this spirit and idealism we publish this handbook for counselors and career advisors in his memory.
"Career is a journey, not a destination"

Ask not "What do you want to be when you grow up?" but "What do you want to be while growing up?" Life and career are both a process. We are always "growing up," we are always involved in a career process. Ziggy reminds us of that when he says:

"Don't take life too seriously; we're here today and here tomorrow."1

The notion of "career as process" is basic to reading this handbook. A career is not something an individual achieves, but something one lives every day. The problem with asking what an individual wants to be when one grows up is that it is a focus only on the outcome. If the focus is only on the goal of reaching the top of the career ladder, an individual may get there and then ask, "Is this all there is?" George Bernard Shaw once said, "The only thing worse than not getting what you want is getting it."

This handbook will focus on the process of career decision making. When reading Using Labor Market Information for Career Decision Making, you should put the accent on Using Labor market information is a tool. Decision making is a tool. The process of using these tools wisely is the theme of this handbook.

Using this process wisely will help individuals avoid being trapped by their decisions or misled by information while growing up. Successful career counselors will help others see that labor market and decision making information are tools to be used in the continuous process of career development and growth.

The persons who help others in the process of gathering, interpreting, understanding, and applying information to the process of making career decisions are the target audience of this handbook. Obviously, this includes counselors at all levels and career education specialists, but this handbook is also directed at those individuals who may be viewed as part of the career development arena. These people include teachers in many subject areas, librarians who order resources, set up displays, and help students find information, and administrators at all levels who work with advisory committees, plan career days or supervise career projects. Job placement specialists, vocational assessment personnel, job developers, and parents are also likely users. Many people are involved in using labor market information for career counseling.

USING THE HANDBOOK

This handbook uses the term "counselor" as "the helper" to represent counselors, career development specialists, teachers, and others who assist students and clients in career exploration or decision making. It uses the term "client" to represent the individual assisted by the counselor. Many people help others in using labor market information. This handbook is intended to be used by anyone who provides assistance in any setting: schools, colleges, government agencies, and other organizations.

People seeking assistance, "clients," may know nothing about the world of work. They may have no ideas about "what they want to be when they grow up." Others may have worked for many years in many jobs and are already grown up. This handbook is intended for either

---

1 Ziggy, from comic strip by Tom Wilson.
situation. Any counselor working with clients needs labor market information in career decision making. To aid the process this handbook is divided into seven parts:

1. Introduction
2. Career Decision Making
3. What is Labor Market Information and How to Use It
4. Why Use Labor Market Information?
5. Where to Find Labor Market Information
6. Using What You Know
7. Appendices

The primary references used with this guide are the Wisconsin Career Information System products which include the Occupations Handbook, Occupations Digest, Education Handbook, PREP, and the computer based components such as Career Scan, School Scan, and MicroSkills. Additional local, state and national references are listed throughout the handbook.

Labor market information should be "counselor friendly" to be successful. That is, it should help counselors provide the best possible guidance with the resources available. Thus, a computer-assisted career guidance system, such as the Wisconsin Career Information System, is a valuable resource for some counselors. Other counselors may have an abundance of counseling time in which they can help clients use labor market information. Others may have limited client counseling time and find that the WCIS Occupations Handbook provides an efficient source of information. You can adapt this handbook to the kind of client counseling time, and resources you have.

Thus, labor market information resources are ready. The handbook for Using Labor Market Information for Career Decision Making is ready. Now it is up to you. Are you ready?

DEVELOPMENTAL GUIDANCE

Developmental Guidance is a model program designed for K-12 schools. It was developed by the Department of Public Instruction and is currently being implemented throughout the state. Labor market information is an important resource in implementing Developmental Guidance.

In viewing its relationship to labor market information, note the scope of the Developmental Guidance program covers all the guidance and career development needs of students K-12. Labor market information is but one facet of the information and resources used throughout the program. Appendix B contains a brief description of Developmental Guidance. It also contains a list of grade level competencies that can be addressed by using labor market information for career decision making. Persons working in career development and career guidance at the elementary and secondary level should review the materials in Appendix B. Others may wish to review it for general guidance competencies that may be useful at the postsecondary and adult level.
One example of career decision making is illustrated by Linus:

"I've decided to become a polled Hereford rancher. I'm writing to the Agriculture Department because I think if you belong to 4-H you're entitled to all the cows you need to get started."

Linus's "case" illustrates the need for having good labor market information to make good career decisions. It also illustrates the fact that many clients already have information that is not very good.

The realities of everyday career choices suggest that there is a need to be filled. We've already heard Linus choose his career; now listen to Hobart Foote, an auto plant utility man, interviewed by Studs Terkel.

"I'm from Alabama, my wife and kids are Hoosiers. I was gonna work for a few years and buy a new car and head back south. Well, I met the wife now and that kinda changed my plans.

"I might've been working in some small factory down south or I might have gone to Detroit where I worked before. Or else I mighta stuck on a farm somewhere, just grubbing off a farm somewhere. You never know what you woulda done. You can't plan too far in advance, 'cause there's always a stumblin' block."

Hobart makes no careful matching of his abilities and interests to job characteristics, no attempt to implement a self-concept, no sequential progression through the phases of a process of career choice. He not only fails to plan, he does not think planning is possible. Not all career counseling clients are like Linus or Hobart Foote, of course. Some do know how to plan but want help with a particular "stumblin' block". Others know they lack certain information and want help finding it. Yet some remain who do not know what they want.

Career counseling clients come in all "shapes and sizes". They also come with a wide assortment of facts, fantasies, fears, and future scenarios about career development. How can a career counselor help each client? Do short clients need special labor market information? Does it make a difference what facts or fears a client possesses? Would Linus find happiness as a rancher? Should Hobart return to the farm? This handbook will enable counselors to better answer these kinds of questions.

Counselors also come in different "shapes and sizes". There are at least two kinds of career counselors. There are those who place a high value on facts, logic, and systematic approaches. "Just give me the facts, Ma'am." And there are those who highly value intuition, deeper understanding, and long-range thinking. "What's the reason behind these facts?" This handbook is written for both types of counselors.

Part of this handbook is about labor market information. "The facts, Ma'am." Another part is about the process of career decision making. "The reason for having and using these facts."
When using labor market information in career decision making, you can't separate them into convenient chapters. In career choosing and career counseling, they're all mixed together. The "facts type" counselor, interested in the practical, sensible, objective approach might prefer to start with information. The "reasons type" counselor, interested in the intuitive, conceptual, subjective approach might like to start with process.

Since the handbook is written for both types but can't be written both ways, it's up to you to adapt accordingly. Always remember that when collecting labor market information and using it in career decision making...

- there are different kinds of clients,
- there are different kinds of counselors,
- and, you can't separate the information from the person or the process.

SUCCESSFUL CAREER COUNSELING

"Information is a curious thing; it doesn't work unless you do."

Getting ready, taking aim, and being hired is the logical, obvious sequence in the process of career choice. However, we know that clients do not always follow this sequence and don't all do it at the same pace or with the same care. Have you ever known a client who went "ready - hire - aim"? Or, do you know the one who always goes "ready - aim - aim - aim..."? Have you ever counseled a Linus or Hobart Foote?

Adequate preparation and careful aiming are more likely to lead to satisfactory hiring. But some clients want and need a "quick job solution". They do not have much time for readiness and aiming. Other clients are interested in careful researching, planning, and integrating career counseling. Still others lack the career maturity to make decisions or even internalise the necessary information to formulate a decision. Regardless of how logical or how rapidly clients go through the process, they will all use information.

The role of the counselor is to help the client use the appropriate process and use information wisely. How is this done?

Recent studies of career and vocational counseling have failed to find different effects for different theoretical treatments. That is, you can not prove that one theory is better than another.

However, the research does suggest that there are four elements common to a variety of theories and treatments used successfully by counselors. These four elements are:

1. Providing the client with social support.
2. Giving pertinent information about alternative choices.
3. Helping the client to clarify personal objectives and potentials.
4. Encouraging the client to develop a system to organise information in relation to available alternative choices.

All of these elements are typical components of the methods used not only by successful career counselors, but also by marital counselors, health counselors, and other counselors who help people make decisions.

The first element, providing the client with social support, is the basic ingredient in any successful helping relationship. Its importance should never be underestimated. It is a basic tool and an essential skill of every counselor. "Don't leave home without it."

Users of this handbook should always keep in mind the importance of the client's need for support. Clients can learn to use both the counselor and other people in building a continuous support network.

The other three elements of successful counseling should remind career counselors that giving information (element #2) is not enough. Helping the client see the relationship of information to personal objectives (element #3) and encouraging the client to learn how to organise the information and objectives in a manner that will lead to an appropriate choice (element #4), are necessary to complete the decision counseling cycle. It should be noted that not all people involved in career development and career counseling will be able to carry out all four elements.

Career counseling involves information—both labor market information and other information. It also involves people—the counselor, the client, and other people for support and

---

knowledge. And it involve: process—deciding to do something.

**Information:** Essentially, there are two kinds of career information:
1) *Inside Information:* This information is inside the decision maker. It reveals goals, values, interests, abilities, and experience of the decision maker.
2) *Outside Information:* This information informs the decision maker about the world of work: occupational options, job information, geographic, economic, and social conditions.

**People:** While the client must make the final decision, others have significant influence on this decision. They include the career counselor, family, and friends of the client.

**Process:** The process of deciding is an intellectual and psychological sequence of activities. It can be divided into three phases:
1) *Acquire:* Collect information about self and environment.
2) *Analyze:* Explore the relationship of this information with personal values, objectives, and personal situation.
3) *Act:* Decide what to do and do it!

Information is important, even crucial, but people also play a significant role in choosing a career. Clients, counselors, and other people in the life of the client can and do influence the information, how it is acquired, and how it is analyzed. Other people even influence how a client acts.

But the process of deciding may be most important of all. All three phases of the process (acquire, analyze, and act) involve information and people. It is important for a client to learn to acquire, analyze, and act on information. That determines not only how well he/she makes one choice, but also how well he/she can make future choices. Providing relevant labor market information is necessary. Helping a client learn how to collect, process and apply future information for future decisions is the goal of effective career counseling.

If we put together the three phases of the process of career choosing and the last three elements of the process of career counseling, it would look like this:

**The Process of Career Counseling**

*Acquire:* Giving pertinent information
*Analyze:* Clarifying personal objectives and potential
*Act:* Organizing information into a choice

Effective counselors will help clients move thoughtfully through all phases of the process of choosing a career or getting a job. Some clients may be tempted to skip or rush the analyzing phase. Some counselors may be tempted to let them.

Situational circumstances — sometimes controllable, sometimes not — often determine how a person will use the deciding process. One counseling theory, "accident theory", stresses the importance of chance as a determinant of personal opportunities for choice. Luck and fortune are factors that operate directly or indirectly in every individual's life. The degree to which they operate as determinants or constraints in career decision making, however, varies in each individual case. The goal of wise decision making is to increase the decision maker's control over his or her choices and outcomes.

There is more than one good way to decide. There are many ways to use labor market information; situational circumstances often determine which way is best. A skillful decision maker will know the "complete, wise process" of using labor market information in career decisions. And she/he will know when circumstances suggest that a less than complete process is appropriate. Giving clients labor market information, or even teaching them what it is and where to get it, is only part of career counseling. Teaching them how to use it wisely in their decisions is the bottom line.
CAREER DECISION MAKING FRAMEWORK

The following summary will provide a career counseling framework for using labor market information in career decision making:

Career decision making involves: information, people, and process.

1. The information is of two kinds:
   - outside: about the environment (includes labor market information)
   - inside: about the decision maker

2. The people involved are: client, counselor, and others.

3. The process has three phases:
   - Acquire—(Ready)
   - Analyze—(Aim)
   - Act—(Hire)

Four elements of successful counseling:

- Provide support
- Give information
- Clarify objectives
- Develop a system of choice
What is Labor Market Information and How is It Used?

"... information about the market where labor occurs."

If you had to choose one of the following jobs, what job would you choose? (Numbers in ( ) refer to the Occupations Handbook of the Wisconsin Career Information System).

- Tile Setter (6414A)
- Coremaker (6861B)
- Operating Engineer (8312A)
- Cartographer (1644A)

You’d say you would like some information first. Well, perhaps what you need is some labor market information.

- What do workers do in these jobs?
- What skills or abilities do they need?
- How many job opportunities are there?
- Where are jobs located?
- What salary are workers paid?
- Where do I get training?

Put in its simplest terms, labor market information is information about the market where labor occurs—where labor skills are exchanged for wages. Information can be descriptive (qualitative) or statistical (quantitative). The key elements in the labor market are the workers (labor resources) and jobs (employment opportunities).

Labor market information may be tied to a specific geographical area, or, in the case of some occupations, may describe labor supply and demand at the statewide or national levels. Generally, when labor market information pertains to a geographical area, it is to a labor market area—that is, an area within which workers may change jobs without changing residence.

The following types of information are included in labor market information:

- Occupational Descriptions
- Wages, Hours, and Fringe Benefits
  - Local
  - Wisconsin
  - National
- Employment Trends and Outlook
  - Local
  - Wisconsin
  - National
- Method of Entry, Qualifications
- Advancement Opportunities
- Educational/Training Programs
- Future Impact of Technology
- Military Training and Employment
- Type of Industry or Business
- Educational Program Classification Systems
- Occupational Classification Systems Based on Similarities in:
  - Work Performed
  - Interests
- Occupational Characteristics
  - Aptitudes
  - Industry Designation
  - Environmental Conditions
  - General Educational Development (GED)
  - Reasoning
  - Mathematics
  - Languages
  - Physical Demands
  - Specific Vocational Preparation (SVP)
  - Temperaments
  - Work Fields (Work Methods)
  - Worker Functions (Data-People-Things)
OCCUPATIONAL DESCRIPTIONS

What is it? The terms occupational description and job description are frequently used interchangeably even though the term job description technically refers to a narrow scope of tasks or duties. An occupational description typically includes characteristics of several closely related jobs.

Occupational descriptions are composed of summary statements that reflect the tasks performed in an occupation. What is done and how it is done is clarified. Occupational descriptions usually contain one or all of the following in summary form.

- What the worker does
- How the worker does it
- A description of the physical and mental activities required
- Job duties by industry, type or size of employer, and size of firm
- What they produce or accomplish
- The hazards or environmental conditions that are present
- The impact of technology on the work tasks
- The working relationship to other people
- The degree of specialization and responsibility
- The tools, machines, and materials used
- The alternate job titles used in some industries

How is it used? Occupational descriptions contain information that allows decision makers to visualize the work situation realistically, thus increasing the chances of a better choice when selecting an occupation.

The occupational descriptions can also help those considering working in a general field to narrow their choice to a more specific area, then choose among jobs within that area.

The following is an occupational description from the Wisconsin Career Information System (WCIS). How many of the components of an occupational description can you identify?

Occupational Description (Operating Engineers 8312A)

Operating engineers run many of the heavy machines used in building projects. With bulldozers, scrapers, and steam shovels, they dig foundations for structures and make roadbeds. They use cranes and derricks to erect steel beams or destroy buildings. Also, they may set up and maintain portable generators, boilers, pumps and compressors. Some machines are simple to run, but many are difficult. Some machines are simple to run, but many are difficult. Operators run the machines by moving lever, handwheel, and pedal controls. Often, all these controls must be moved at the same time. They also control attachments like buckets, blades, and swing booms. Operating engineers must handle these large, powerful machines with skill to avoid damaging property or injuring other workers.

Engineers also maintain their machines to keep them running well. Operating engineers may work more or less than 40 hours per week, depending on the season. Running the machines can be tiring.

Most operating engineers work for private construction firms.

ADVANTAGES/DISADVANTAGES CITED BY WORKERS

Operating engineers enjoy working outdoors. Job security is good due to the demand for their skills. They dislike the lack of steady, year-round work. Working in cold weather is another disadvantage.

RELATED TITLE
Heavy Equipment Operator

WAGES, HOURS, AND FRINGE BENEFITS

What is it? The terms “wages,” “salary,” or “earnings” are often used interchangeably. They are stated in hourly, daily, weekly, monthly, and annual terms. The dollar figure used in stating a wage rate usually does not include fringe benefits, such as medical insurance, sick leave, and paid vacations, which, if available, are listed separately. Normal work week hours, usual work schedule (days of the week), shift work, and overtime pay are also covered.

Wage information is useful only when the relevant factors associated with a particular wage rate are known. For example, the amount
of experience or training needed to qualify for a given salary rate would have to be known for the information to have value.

How it is used: The earning potential for an occupation is a prime consideration for many in choosing an occupation. However, the type of wage data required will vary, depending on the decision being made at the time. For example, a person inquiring about a particular job opening would want accurate information regarding the current wages being paid. On the other hand, someone involved in long-range career planning and studying several occupations would probably be more interested in the general earnings potential for each occupation or the relative levels of earnings between occupations.

Salary data for operating engineers (8312A) is presented below. Does it provide the essential information?

National Salary Range: $11.00 to $18.00 average per hour

This range is based on union wages in urban areas. Wages vary with type of equipment operated.

Salary Information in Wisconsin

Starting Salary: $5.50 to $9.00 per hour
Normal Salary Range: $8.00 to $16.00 per hour

Salaries will vary according to the type of machine operated. Operating engineers are usually union members, so they receive good fringe benefits. Apprentices start at about half the union pay scale. Layoffs do occur, so hourly earnings may not indicate the amount of annual earnings.

EMPLOYMENT TRENDS AND OUTLOOK

What is it? Employment trend data indicate past and current increase or decrease in employment in an occupation or industry. Employment outlook is an estimate of future employment. Underlying reasons for changes in employment trends and outlook are explained in the outlook sections of the Wisconsin Career Information System. Variations in supply and/or demand for an occupation in one or more industries is also included.

How is it used? Current employment trend and outlook data can be important to career decisions. Popular perceptions of the outlook for any given occupation may be outdated. That is, there may have been a surplus of job seekers for a particular occupation. That may no longer be true although the general public is unaware of any change in the supply or demand for workers. Investigation of current labor market information would correct misconceptions.

Outlook information is described below. Would it provide a clear picture of what is happening in this occupation?

Trends and Outlook (Operating Engineers 8312A)

Overall National Outlook: Fair

Increased construction of factories and other buildings, plus highway maintenance, will create more jobs unless prolonged recessions occur.

Employment in Wisconsin

Number Employed in 1980: 5,790
Number Expected to be Employed in 1990: 6,480
Expected Openings 1980-1990: 2,000

Current Outlook: Limited

Long Range Outlook: Current outlook will improve

This is a medium-sized occupation in Wisconsin. Jobs are limited in many areas of the state. Experienced persons will have the best chances for employment. Job opportunities will fluctuate as economic conditions affect construction activity. During economic downturns, there usually are more jobs available in commercial construction and highway repair than in home building.

Long-range predictions are based on current social and economic trends. These could change.

Highway revenues, state spending for major construction projects, and transportation costs determine the need for workers in this occupation. Interest rates also affect new construction projects, and in turn, job opportunities. Federal funding for highways and bridges also affects job outlook.

METHOD OF ENTRY/QUALIFICATIONS

What is it? This section includes information regarding employer hiring requirements, as well as the education and training necessary to
compete for jobs in an occupation. Specific information consists of items such as experience, education, physical requirements, and state licensing or certification. Personal interests and aptitudes important for success on the job are also included. Recommended high school courses, part-time and summer employment, on-the-job training, related military training, union apprenticeship, and hobbies are some of the more important items listed under training and educational requirements.

How is it used? This type of information is vital in making plans to prepare for employment in an occupation. Long-range planning must take into consideration any lengthy training or educational requirements for a job. Experience, hobbies, interests, and aptitudes can also be valuable clues to whether a person has previously acquired skills that can be transferred to an occupation.

A method of entry description follows. What are the criteria for entry into this occupation?

Method of Entry (Operating Engineers 8312A)

Operating engineers begin as apprentices. The Operating Engineer Apprenticeship Committee has a training area in Coloma, Wisconsin. Apprentices must be high school graduates, take an aptitude test and interview with the apprenticeship committee.

Experience in construction or in running heavy machines is helpful.

Some vocational schools offer programs which may improve chances for finding jobs. Few employers will hire untrained help because of the risk of damage to equipment or injury to workers caused by poor handling of machines.

Most employers hire from eligibility lists. Others may advertise in newspapers, hire walk-ins, or promote from within the company.

ADVANCEMENT OPPORTUNITIES

What is it? This type of information includes description of advancement and promotional opportunities in a field. It tells of jobs from which and into which workers may be promoted, the difficulties or uncertainties of promotion, and the rate of promotion. Opportunities for job improvements without promotion, such as higher pay, wider span of authority, self-employment, title or rank, professional standing, or relocation for more pay or prestige, are covered. Requirements for promotion, such as a willingness to move, advanced degrees, or years of service, as well as occupations to which workers may transfer, are also discussed.

How is it used? This information is intended to provide a realistic look at promotional opportunities and job improvement potential in an occupation. It can help career planners eliminate misconceptions about jobs. For example, some jobs considered to be "dead end" jobs can, in fact, be stepping stones to better jobs. Skill transferability is also an important concept, both within an occupational area and between occupational areas.

What can you learn about advancement opportunities from the description presented below?

Advancement Opportunities (Operating Engineers 8312A)

Advancement is limited for operating engineers. They may become supervisors but this may not bring higher wages. Some start their own construction firms.

EDUCATIONAL AND TRAINING PROGRAMS

What is it? This information provides descriptions of programs of study, and the locations of institutions which offer them. Some include a short description of the education/training program (subject matter, length of course, prerequisites (if any), the objectives of the course, and a description of the institution).

How is it used? Information about education and training programs tell whether particular courses exist locally. The length of time required to complete a course is also important. Course prerequisites should be considered in planning an educational program.

Educational information is presented below. What additional sources would you recommend a person use once they have looked at this?

Educational and Training Programs (Operating Engineers 8312A)
For vocational programs, see EDUCATION HANDBOOK: 580 Heavy Equipment Technology

Description of Program:

Heavy equipment technology programs prepare mechanics to work on construction equipment, such as bulldozers and earth movers. They maintain and repair heavy diesel equipment.

Courses:

Course work could include diesel technology, related machine shop, industrial hydraulics and pneumatics, related welding, applied mathematics, and applied science.

Schools Offering Program: (Exact program description, courses, and/or title may differ for these schools.)

26 Wisconsin Operating Engineers - Coloma
292 Gogebic Community College - Ironwood, MI

FUTURE IMPACT OF TECHNOLOGY

What is it? Technology is rapidly changing the world of work. Information about the effects of specific technologies on jobs includes computerized lasers, fiber optics, and biotechnical engineering. Changes in tasks and skill level requirements are usually included as are changing responsibilities.

How is it used? Technological information is valuable in determining whether an occupation will change significantly because of new technologies. The advantages and disadvantages of these changes can then be considered in career decisions.

The high technology information from Wisconsin Career Information System (WCIS) is found in the 600 section of the OCCUPATIONS HANDBOOK. If a specific occupation is significantly affected, a reference to that section may be included in the OCCUPATION HANDBOOK description. For example, 8312A Operating Engineers is referenced to the "laser technology" area (640) for "industry" (642).

MILITARY TRAINING AND EMPLOYMENT

What is it? Military labor market information lists military occupations, the education required when enlisting, the training provided and the branch of the armed services employing workers. Information about military occupations also identifies civilian counterparts. Gender restrictions are indicated for combat-related jobs. Required scores from the Armed Services Vocational Aptitude Battery (ASVAB) are listed for each military occupation.

The armed services are a significant trainer and employer of young adults. Thus, civilian labor market information alone does not provide a comprehensive base for making career decisions. It is important to include military training and career information especially about occupational areas with civilian counterpart jobs. Many young people need to know about military opportunities for career training and employment.

How is it used? Military information is presented below as it appears in the Occupational Description for Operating Engineers in (8312A).

MILITARY OCCUPATION NUMBER 299
Construction Equipment Operators

IMPORTANT: Actual work performed in the military may be somewhat different from work performed in civilian life, even for occupations with identical titles. Be sure to compare the military and civilian descriptions carefully.

SERVICES OFFERING OCCUPATION
Army, Navy, Air Force, Marine Corps
RANK
Enlisted

RELATED CIVILIAN TITLES:
8312A Operating Engineers

MILITARY OCCUPATIONAL DESCRIPTION

Tons of earth must be moved to build airfields, roads, and dams. Construction equipment operators use bulldozers, cranes, graders, and other heavy equipment used in military construction.

Construction equipment operators in the military perform some or all of the following duties:

Drive bulldozers, road graders, and other heavy equipment.
Lift and move steel and other heavy building materials using winches, cranes, and hoists.
Pave roads, using concrete or asphalt paving equipment.
Dig holes and trenches using power shovels.
Remove ice and snow from runways, roads, and other areas, using scrapers and snow blowers.

Construction equipment operators work outdoors in all kinds of weather conditions. They are subject to loud noises and vibrations.
DEMANDS, ATTRIBUTES
Normal color vision is required to identify colored flags and stakes
Helpful attributes include:
- Interest in operating heavy construction equipment
- Preference for working outdoors

TRAINING INFORMATION
IMPORTANT: Some military training and experience may not be accepted by civilian employers. Little information is available concerning this situation although problems in transferring training and experience have been noted in many occupations. Likewise, the military does not automatically accept civilian training and experience.

There are no special requirements for this occupation.
Job training consists of between 8 and 9 weeks of classroom instruction including practice operating construction equipment. Course content typically includes:
- Operation of different types of construction equipment
- Maintenance and repair of equipment
- Further training occurs on the job and through advanced courses. The Army offers a certificate apprenticeship program for this occupation.

OPPORTUNITIES/ADVANCEMENT
IMPORTANT: Because you are interested in a military occupation does not mean you are qualified. The military uses test scores (usually the ASVAB) and current manpower needs to determine placement in training. Further, unless guaranteed in writing, acceptance for and successful completion of training does not assure you will work in the occupation for which you trained. Be sure to discuss this situation with your recruiter.

The services have about 9500 construction equipment operators. On average, they need about 1820 new construction equipment operators each year. After job training, construction equipment operators work as members of construction teams under the direction of supervisors. They normally gain experience by operating one piece of equipment. With time, they have the opportunity to operate a variety of equipment. Construction equipment operators have the opportunity to become construction superintendents.

Civilian construction equipment operators work for building contractors, state highway agencies, and other large-scale construction firms. They perform duties similar to those performed by construction equipment operators in the military. Civilian construction equipment operators also may be known as operating engineers or heavy equipment operators.

ALTERNATIVE TITLES:
Operating Engineers; Heavy Equipment Operators

SAMPLE MILITARY TITLES
Army: Heavy Construction Equipment Operator
Navy: Equipment Operator, Third to First Class
Air Force: Construction Equipment Operator
Marines: Engineer Equipment Operator

TYPE OF INDUSTRY OR BUSINESS
What is it? Each type of industry or business has a different working environment even though they may employ persons in similar occupations. For example, a truck driver who works for a moving and storage company will usually have to load and unload the trucks by hand whereas an over-the-road driver may not touch the freight. Likewise, the skills and work of a plumber will vary considerably between residential construction and industry. The type of industry or business is a major influence on the specific job skills that are most frequently used, the environmental working conditions, pay and benefits, and numerous other conditions of employment.

How is it used? Knowing the industry or business in which an occupation is located provides significant information to the client. With this information on the operating conditions within that industry and the products they produce, the user can make more specific judgments.

EDUCATIONAL PROGRAM CLASSIFICATION SYSTEM
What is it? Educational programs are organized in a system called the Classification of Instructional Programs. This structure is often referred to as the CIP classification. It organizes all instructional programs at the high school and post high school levels into a common taxonomy.

How is it used? The Classification of Instructional Programs is used at state and national levels to collect data on enrollments and
graduates at various institutions and levels of education. Data on graduates is useful in career planning since this represents the primary source of labor supply for many occupations. Comparing supply data with demand forecasts will enable a person to predict the likelihood of employment in a specific area of training.

OCCUPATIONAL CLASSIFICATION SYSTEMS

What is it? Occupational classification systems use a variety of factors such as tasks performed, skill level required, worker interests, training requirements, the industries where work is performed, and other characteristics. Occupational differences create the base for the classification system.

How is it used? All systems use a structured methodology to assign a classification code to an occupation or program. This systematic process is referred to as job analysis, industry analysis, or program analysis, depending upon the type of classification system being developed. These coding characteristics can be used to relate one classification system to another or to match the characteristics of an individual with an occupation or program. Classification systems make it possible to draw comparisons between individual occupations and groups of occupations. Systems that group occupations according to similar types of work performed are useful in identifying skills that are transferable from one occupation to another. Other systems, which group occupations by instructional program areas, make it possible to link vocational and educational programs to specific occupational training needs. A system in which interests are the basis for classification can be used by those who express an interest in certain kinds of activities, even though they may have little work experience.

Some of the most commonly used occupational classification systems are listed below.

1. The Standard Occupational Classification – SOC
3. The Standard Industrial Classification – SIC (This classification system does not actually deal with occupations, but rather is used to categorise industries by their economic output. It is frequently referred to when presenting employment data by industry.)
4. The Census population (The Census organises occupations using a classification system compatible with the Standard Occupational Classification System.)

OCCUPATIONAL CHARACTERISTICS

What is it? Occupational characteristics are the identifying and descriptive factors that are unique to a given occupation. The basis for most occupational coding is the Dictionary of Occupational Titles where over 12000 job titles are coded to twelve characteristic categories. The Standard Occupational Classification System aggregates these 12000 job titles into slightly over 700 occupational titles. The Census Population system is closely aligned with the Standard Occupational Classification System. The Standard Occupational Classification System is used for Wisconsin Career Information System (WCIS) and more recently, by the state and federal governments in collecting employment data.

How is it used? Characteristics are used in the Wisconsin Career Information System to describe an occupation in terms that are useful in several ways. Since they are expressed in common terms, they allow comparison between occupations. Thus, occupations that share some of the same or similar characteristics can be grouped together to produce lists that are useful in searching for occupations associated with an individual's transferable skills. That is, skills learned in one occupation or activity that may be used in another.

Individuals may compare their own skills, knowledge, interests, and abilities with those called for by occupations they have an interest in, thus improving chances for a better career choice. For example, the physical demands of an occupation can be an important consideration not only for persons who have a physical impairment, but also for anyone who is unwilling or unable to engage in certain physical activities, such as lifting heavy objects continuously.

Similarly, the length of training time required for an occupation might be a determining
factor for someone who needs an immediate income to support a family.

The following is a list of coding characteristics from the Wisconsin Career Information System (WCIS) occupation Operating Engineer (8312A). What do they tell you about the occupation? How can you use them in counseling a person about a career?

<table>
<thead>
<tr>
<th>1 INTERESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Work with machines or equipment</td>
</tr>
<tr>
<td>7 Work primarily with tools or objects</td>
</tr>
<tr>
<td>8 Follow a set routine or one best way of doing things</td>
</tr>
<tr>
<td>13 Evaluate people or products and make decisions</td>
</tr>
<tr>
<td>15 Problem-Solving: Making decisions, often involving pressure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16 ABILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Numerical: Solve simple mathematical problems quickly and accurately</td>
</tr>
<tr>
<td>20 Spatial: Understand the relationship of solid objects to those on a flat plane</td>
</tr>
<tr>
<td>21 Form Perception: Make visual comparisons between the shapes and details</td>
</tr>
<tr>
<td>23 Coordination: Work with your hands, fingers, or feet easily, quickly, and accurately</td>
</tr>
<tr>
<td>24 Motor Coordination: Coordinate the movements of your eyes, fingers, and hands while working quickly and accurately</td>
</tr>
<tr>
<td>25 Manual Dexterity: Move your hands easily and skillfully as you work with objects</td>
</tr>
<tr>
<td>27 Eye-Hand-Foot Coordination: Move hands and feet in a coordinated manner as you react correctly to what you see</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>30 PHYSICAL EFFORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 Much lifting or physical exertion</td>
</tr>
<tr>
<td>34 Lift up to 50 lbs., and carry up to 25 lbs.</td>
</tr>
<tr>
<td>36 Climb, balance, stoop, kneel, crouch, and crawl</td>
</tr>
<tr>
<td>37 Reach, handle, and touch</td>
</tr>
<tr>
<td>39 See clearly</td>
</tr>
<tr>
<td>41 Sit most of the time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>50 OFFICE OF EDUCATION (OE) OCCUPATIONAL CLUSTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>54 Construction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>70 DICTIONARY OF OCCUPATIONAL TITLES (DOT) OCCUPATIONAL FAMILIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>78 Structural Work Occupations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>80 DATA, PEOPLE, THINGS, IDEAS, INTERESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>81 Data: Working with numbers or facts</td>
</tr>
<tr>
<td>83 Things: Operating machines, using tools, or materials</td>
</tr>
</tbody>
</table>

| 84 Ideas: Using ideas or knowledge |

<table>
<thead>
<tr>
<th>100 STANDARD OCCUPATIONAL CLASSIFICATION (SOC) DIVISIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 Transportation and material moving occupations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>166 EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>168 High school diploma, or G.E.D.</td>
</tr>
<tr>
<td>169 Vocational Training</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>176 YEARS OF POST-HIGH SCHOOL EDUCATION AND TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>177 Less than four years of training beyond high school</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>180 OUT-OF-SCHOOL TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>181 Apprenticeship: A formal, paid program to learn a craft or trade</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>190 OTHER QUALIFICATIONS REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>194 Union membership</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>199 WAGES AND SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 Minimum wage or more per hour</td>
</tr>
<tr>
<td>201 $11,000 or more a year (over $5.29 per hour)</td>
</tr>
<tr>
<td>202 $18,000 or more a year (over $8.65 per hour)</td>
</tr>
<tr>
<td>203 $25,000 or more a year (over $12.00 per hour)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>210 URBAN OR RURAL JOB SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>211 Urban: Metropolitan areas and suburbs</td>
</tr>
<tr>
<td>212 Rural: Small towns and country areas</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>213 TRAVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>215 Local travel and/or working at different job sites daily, weekly, or monthly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>220 WORKING CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>222 Mostly outside</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>230 EXPOSURE TO UNPLEASANT WORKING CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>234 Noise and vibrations</td>
</tr>
<tr>
<td>235 Hazardous conditions</td>
</tr>
<tr>
<td>237 Work week normal</td>
</tr>
<tr>
<td>240 Overtime normal</td>
</tr>
<tr>
<td>246 Overtime work often seasonal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>270 GUIDE FOR OCCUPATIONAL EXPLORATION (GOE) WORK AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>275 Mechanical</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>300 SCHOOL SUBJECTS OR INTERESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>307 Industrial Arts: Drafting, graphic arts, metal working, mechanics, construction, woodworking, electricity or electronics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>330 FIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>336 Industrial Production: Foundry work, machining, printing, and assembly</td>
</tr>
<tr>
<td>338 Scientific, Technical, Mechanical and Repair: Mathematics, biological, chemical, and physical</td>
</tr>
</tbody>
</table>
sciences, engineering and technology, and mechanics and repair

340 READING, WRITING, AND SPEAKING ABILITIES

341 READING LEVELS

343 Reading Level 2 – Read simply written material and learn job terms for: recipes, invoices, labels, or rules

347 WRITING LEVELS

348 Writing Level 1 – Little or no writing

353 SPEAKING LEVELS

354 Speaking Level 1 – Speak simple sentences for questions and following instructions

370 OHIO VOCATIONAL INTEREST SURVEY (OVIS) SCALES

373 Machine work

500 TYPE OF OCCUPATIONAL DESCRIPTIONS

503 Wisconsin and national information

575 HOLLAND THEMES

580 Realistic (primary)

583 Conventional (secondary)

590 Enterprising (tertiary)
Why Use Labor Market Information?

“Never ask a barber whether you need a haircut”

Labor market information provides the user with a career decision making tool. Using labor market information makes an emotional process more rational. Since labor market information is factual, it is a good place for career decision making to start.

Labor market information provides the user with career decision making tools. Labor market information is factual and can thus make an emotional process more rational. While individuals have career fantasies, labor market information is objective. Job data may give hope or cause discouragement, but it also balances the decision making process. Even if a client pursues an unlikely goal, it will be done with greater understanding of the occupation.

In choosing among career options, an individual may need to compare similar kinds of information. Imagine that a person needing a job is told he/she could have any one of the following three jobs:

1) Cartographer – 1644A
2) Operating Engineer – 8312A
3) Coremaker – 6861B

The individual might well begin by comparing the three occupational descriptions. Supposing all looked equally appealing, he or she would perhaps compare salary ranges next. On the other hand, if the person had recently been phased out of an obsolete job, employment trends might instead be the prime consideration in choosing a new position.

Thus, different individuals, given the same options, might very well set different criteria in deciding among the positions. How would you rank the following types of labor market information in choosing among the three jobs?

- Job Description
- Preparation and Training Required
- Occupational Characteristics
- Wages, Hours, Benefits
- Current Openings for Jobs
- Employment Trends

Labor market information gives direction to the decision maker, but this direction is commonly influenced by the person’s situation, background, and values. Thus, effective career counseling requires that the counselor know as much as possible about the client. If counselors and clients pool their insights about labor market information and the decision maker, a wise career decision could result.

Good career counseling will help clients see the relationship between factual information and the beholder’s values, beliefs, previous knowledge, and experience. Information that is deemed valuable depends on these characteristics. If a client changes any of these characteristics, the value of the information would change too.

Compare the following samples of dispassionate labor market information.

1) From WCIS OCCUPATION HANDBOOK - News Vendor (Occupation 4365)

News vendors sell newspapers. Some sell newspapers to customers on the street or from newspaper stands. Others sell and deliver newspapers door-to-door along an assigned route or in a neighborhood.
These workers may walk or ride a bicycle to deliver newspapers. They collect payments for newspapers and return change. Some also keep records of customer accounts. Many of these jobs require early morning, evening, or night work. They also may require weekend and holiday work.

Work locations include newspaper companies, newspaper stands, and self-employment.


"Key persons in the role set of a newspaper carrier include the following:

"The customer. Customers like to receive their newspapers in a convenient place, unaffected by rain, snow, or wind. They can rarely tolerate a delay in delivery longer than ten minutes off one's usual time. All of them desire that the newspaper carrier shall stay off the grass, stay out of the flower gardens, and indeed, would prefer that he/she not step on the property at all. Should the newspaper carrier be bitten by the customer's dog, the customer is likely to blame the newspaper carrier for upsetting the dog.

"Non-customers. Other persons may also give the newspaper carrier trouble since they object to his/her taking shortcuts across their property. They also have dogs.

"The superior. This individual tries to maintain the fiction that the newspaper carrier is an independent business person. Therefore, he/she has periodic meetings in order to 'counsel' them in their business activities. His/her pep talks are frequent and must be endured.

"Other carriers. One occasionally encounters persons who carry newspapers for competing companies (or even of the same company) who attempt to take away one's subscribers."

Here is another example closer to home:

1) From WCIS – Counselors (Occupation 2400A).

Counselors help people deal with social and emotional problems. They interview, test, and counsel clients over a period of time.

Counselors usually specialise in one of two areas. School counselors help students with social and emotional problems. They may help students recognise their interests and abilities so they can decide on further education or training. College career planning and placement counselors help students decide on careers. They bring employers to their campuses so students can interview for jobs.

Counselors are employed in a variety of places, including public schools and colleges.

Counselors spend most of their time in office talking to clients and writing reports. They generally work 40-50 hours a week. They may occasionally work irregular hours.

2) Fill in your own emotional description of what it is like to be a school/college counselor, or a rehabilitation counselor, or whatever you are:

(What do you feel is left out of the WCIS description?)

BIAS AND BARRIERS

I am biased; labor market information is not! People are not neutral, dispassionate or unbiased; labor market information is. Fortunately, labor market information is not just impressions inside a client's head or heart. Accurate, reliable, relevant, qualitative, and quantitative labor market information does exist. It is also readily available to counselors and clients. This kind of labor market information, or the absence of it, can make a big difference in the success of career choices.

Adding this rich resource to the repertoire of a career counselor can contribute to increased counseling success. Objective, qualitative, and quantitative labor market information helps a client round out his/her knowledge about a career choice. It adds facts to impressions. It provides some information not otherwise available. It helps to counteract biased or inaccurate perceptions.

You would not ask a car salesperson if you need a new car or a barber if you need a haircut. Career information given to you by some sources is, at best, subjective and one-sided. The catalog for "Standard University," the brochure of the "Honeymoon Hotel," and the career opportunity pamphlet distributed by "Hi-tech Spectra" are similar in one way: they were all designed to promote themselves, not assist in counseling clients. They are more interested in promotion than in career decision making! They all provide useful career information for decision
making, but are insufficient, even misleading, if used alone.

What are some of the barriers that keep some counselors from using information about the labor market? "It's dull; it's out of date; it's irrelevant; its organization is complicated; it doesn't motivate." Or, "I don't feel comfortable using it because I'm not that familiar with computers or printed documents." Frequently, the most serious limitations are the ones we impose on ourselves and our clients or the barriers clients impose on themselves. One of the best ways to overcome these barriers is to become more familiar with labor market information, and to use it.

EVERYONE HAS LABOR MARKET INFORMATION

Obviously, clients already have some labor market information. Everyone does. We read about jobs, have friends in various occupations, watch television where many careers can be seen, and use our own observations from direct experience. We collect information about what certain jobs are like when we do grocery shopping, attend a professional football game, go to a concert, travel in a plane, or have our cars repaired. This is qualitative information, more like impressions of the skills, aptitudes, interests, and training required in various jobs. We also get a feeling about how much we would enjoy doing such a job. We sometimes make evaluations from our impressions: "I could never do that;" "It would be impossible to get a job like that;" or "That job probably pays a lot of money."

These impressions are all useful types of labor market information for career decision making. However, they may be incomplete, sometimes inaccurate, and perhaps irrelevant. Labor market information impressions are influential in career decision making, but often at an unconscious level. They may not be explored wisely. These unconscious beliefs are part of every client's career decision making. Counselors should assist clients in learning how they affect decisions.

At this point, it is important to remind ourselves of the relationship between labor market information and all other information. For example, a client believes that he/she is not good with numbers. He/she may not look up certain occupations because of this belief. Labor market impressions such as observing the check-out clerks in grocery stores together with a self-assessment may lead the client to conclude that he/she cannot do the job of grocery store clerk. He/she may get a different impression reading the Wisconsin Career Information System job description for cashier-checker (4364B). It shows that cashiers need to be able to count, fill out forms, keep some records, and remember changes in prices. It requires relatively little actual math skill.

OCCUPATIONAL DESCRIPTION

Cashier/checkers figure the amount of a customer's purchase on a cash register. In some stores, they hold the products over a laser. The laser reads the Universal Product Code and enters the price in the cash register's computer. Cashiers receive payment for the purchases, make change, and give receipts. Cashiers fill out charge forms for credit card sales. They get managers to approve customer's checks.

Cashiers keep records of each sale so that accounts can be balanced at the end of the day. They often review price sheets to note changes. In some stores, they receive coupons and give credit for them. Sometimes they give trading stamps. Cashiers also handle customer complaints and returns or exchanges of merchandise. Often, they help bag or wrap purchases. When away from the cash register, they may mark prices, stock shelves, or set up displays.

Cashiers/checkers work in retail stores such as supermarkets, drug stores, and department stores.

Most cashiers work part-time or split shifts. Full-time cashiers work about 40 hours per week. They often work nights, and may have to work weekends and holidays. Most work is done while standing.

Another client knows about the cold weather and tornado threat in a certain geographic area. He also knows that his wife would never live there. Because of this "outside information" he rejects all labor market information related to that geographic area.

All information in career decision making is complicated by the interrelationships of values, beliefs, attitudes, biases, impressions, and other information. This creates an additional problem for the counselor because he/she may not know very much about the unique character of each client. When using labor market information in
career decision making, the counselor should always keep this in mind and attempt to discover more about clients' unknown personal factors.

INFORMATION VS. VALUES

Which is most important in career decision making—information or values? Which should career counselors deal with first? People are different because they have different values. People are also different because they have different information. People also might have different values if they had different information.

Your values and beliefs influence your information and experiences and how you evaluate it. But new information and experiences can change your beliefs and values.

- Values determine the information that is important.
- Information influences values.

So when we try to isolate labor market information in career decision making, we should always remember this interrelatedness.

Decision making can be a process of discovering goals as well as achieving them.

GETTING YOUR LABOR TO MARKET

We have defined labor market information as information about the market where labor is exchanged for wages. It includes descriptive and statistical information about workers and jobs. We have shown how values and information cannot be separated. The reason for using labor market information in career decision making is to improve a client's chances of finding a job in the labor market that "pays off" in terms of wages and values.

<table>
<thead>
<tr>
<th>Acquire</th>
<th>Giving pertinent information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze</td>
<td>Clarifying personal objectives and potential</td>
</tr>
<tr>
<td>Act</td>
<td>Organizing information into a choice</td>
</tr>
</tbody>
</table>

The Process of Career Decision Making Involves:
Phase I Acquire "Get Ready" Collect
Phase II Analyze "Aim" Clarify
Phase III Act "Hire" Commit

The three phases are not precise or totally independent. It is helpful, however, to think of them as sequential in relation to the information.

Phase I Collect it
Phase II Relate it to your situation
Phase III Use it to decide

In order to use labor market information, you need to have it, know how it relates to your situation, and be able to apply it to each choice. Therefore, the three phases of the process are repeated endlessly in career decision making.
Labor market information is all around us. Each of us can readily think of labor market information sources such as the Wisconsin Career Information System, (specifically the occupation and education files and/or handbooks), the federal Occupational Outlook Handbook, and the Wisconsin Occupational Projections to 1990. While the Wisconsin Career Information System is a comprehensive source of local, state, and national data, many local information sources are readily available to supplement this source. First, look at the information in the Wisconsin Career Information System. Then look at sources such as the local newspapers, radio and T.V. news programs, magazines, government reports, and personal contacts in the community. Labor market information surrounds us every day as we talk about a new business, layoffs at a plant, a hot new service or a product that is sweeping the country, or technologies that alter the demand for products or services.

WISCONSIN CAREER INFORMATION SYSTEM

The Wisconsin Career Information System is a consortium of providers and users of occupational, educational, and other career resources. It operates on user fees paid by members and is housed at the Vocational Studies Center, School of Education, University of Wisconsin-Madison. It is recognized by the State of Wisconsin and its agencies as the primary deliverer of labor market information for schools and agencies in the state. WCIS gathers information from many sources. The data is analyzed and re-ordered to create attractive, accessible career planning resources. Components of WCIS contain the following kinds of labor market information:

1. Occupational Information
   a. National information on over 700 related titles which encompass all work activities in U.S. society
   b. State information on approximately 450 titles including a detailed description, worker perceptions, method of entry, state outlook, regional outlook, salary, and sources for more information

2. Education Information
   a. Descriptions of 772 college and vocational programs
   b. Detailed information on 57 public and private colleges and universities in Wisconsin, 40 schools in nearby states, and 31 specialty colleges throughout the U.S.
   c. Detailed information on over 150 institutions offering vocational training in Wisconsin

3. High Technology Information
   a. General information on critical high technology areas
3. High Technology Information (cont'd)
   b. Specific information on affected work areas and skills necessary for people to prepare for technology
   c. Direct references to occupations expected to be most influenced

4. Other Information
   a. A detailed, 24-page newsprint description of financial aid programs for Wisconsin residents
   b. Descriptions of 650 items which directly relate to the world of education and work, and which can be used by professionals to aid instruction

5. Integrated Information
   a. The full-system microcomputer version contains over 1,500 occupational and educational characteristics which are available to users for search of the various data files.
   b. All occupational titles are presented within a structure relating each title to others in the system.
   c. Occupational titles are cross-referenced to appropriate college and vocational programs by name, and to high technology areas expected to have an effect upon them.

6. National Search Programs
   A search procedure to access over 1,400 universities and colleges in the U.S.

LOCAL SOURCES

Although local labor market information may be of the most useful for career decision making, most available published reports provide information at the state or national level. Thus, career counselors must find methods of obtaining local labor market information through local channels in addition to the usual state and federal sources.

As we have pointed out, the Wisconsin Career Information System is a fundamental source of national, state, and regional labor market information. To supplement this at the local level, counselors must find methods of interfacing with local sources. This interface will vary considerably from one area to another. Sources that have been used are listed below. Some will be used in any geographical area. It is hoped that the list will suggest other sources that the reader can find locally.

- Area labor market analysts at Job Service Offices may have information about local areas throughout the state.
- Employment counselors in Job Service offices are a valuable source of local labor market information.
- Annual planning information reports for local areas may provide some information.
- The Labor Market Bulletin for all major metropolitan areas gives employment data.
- Projections of Employment by Industry and Occupation for various metropolitan areas, groups of counties, or individual counties should be checked.
- Local newspapers, especially the business sections, often contain articles on new or expanding firms, firms going out of business, and local economic trends.
- Local Chambers of Commerce often maintain lists of employers classified by industry. They are also a source for future trends and new employment opportunities.
- Small Business Administration offices have information on the number and kinds of new businesses that have applied for assistance.
Local branches of major companies often have community affairs or public relations representatives who have extensive information about their own companies.

Local chapters of trade unions, professional organisations, and trade associations have employment data on occupations within their own fields.

Business magazines, particularly those that focus on Wisconsin business, publish lists of the leading Wisconsin companies annually.

JTPA Service Delivery Areas conduct labor market studies to establish the need for training programs. They often have staff who are very knowledgeable about the local labor market.

Organisations, such as the Urban League, work for equal opportunity through training and employment programs, and gather information for their needs.

Local vocational and technical institutions and four-year college placement centers are another potential source of local data.

Economic reports published by financial institutions may be helpful.

Local joint apprenticeship committees know the demand for new workers in apprenticable trades.

Special regional and area studies done by various organisations should be identified and examined.

There are numerous ways in which sources of local labor market information can be acquired through the development of relationships with local organisations. A few of the ways this might be accomplished are:

Develop a communications/information exchange “network” with other counselors. Include those who work with the Job Training Partnership Act (JTPA), J.t.o Service Office, Chamber of Commerce, unions, private industry councils, economic development offices, local newspapers, and educational institutions.

Visit public agencies and private businesses to learn first hand about their needs. Try to establish working relationships with their personnel offices.

Help in organising and staging a local “job fair” in which employers are invited to give presentations about career opportunities within their organisations.

Conduct phone or mail surveys to obtain information regarding projected job openings, applicant supply, training requirements, etc., directly from employers. Before doing this, check with the local Job Service Office and your JTPA Service Delivery Area to be sure it has not already been done. If possible, form a partnership with public or private organisations that have similar needs.

Promote the establishment of citizen advisory committees made up of representatives from both the public and private sectors, to help counseling department’s better serve the community.

Establish and maintain an in-house reference library for labor market information, either within the office or, if that is not possible, at the district level.

Establish a job club in which individual job seekers form a group to assist each other in obtaining jobs.

STATE AND NATIONAL SOURCES

Sometimes the information provided through local sources and the Wisconsin Career Information System may not be enough to solve your problems. Where do you go, then? There are a large number of specialised state and national data sources available. Some of these are used to develop the information provided in the Wisconsin Career Information System. Others are unique information sources dealing with special user populations.

For example, information on women in the labor force can be found in a publication by that title published by the Wisconsin Department of Industry, Labor and Human Relations. Wisconsin data on the occupations of white male heads of households can be found in the Census of Population. To assist the counselor in identifying and locating some of these information sources, an annotated list follows. This list covers labor market information as well as other career counseling resources. The list is alphabetised...
by the first significant word. The contents of each product or source is briefly described. The address for ordering these resources is included when it is available. Many state and federal publications are free; however, there is a charge for GPO (Government Printing Office) publications as there is for commercial publications. Cost information is given if known.

**Wisconsin Sources**

*ABC's of LMI, an Introduction to Labor Market Concepts*. 1983. This report is an introduction to labor market concepts. It describes how labor markets operate and provides information about labor markets. Available from Job Service Library, Wisconsin Department of Industry, Labor and Human Relations, PO Box 7944, Madison, WI 53707. Free.


*Children of Migrant Agricultural Workers in Wisconsin*. Eleanor Cautley, Doris P. Slesinger, and Pilar Parra. September, 1985. Available from the Applied Population Laboratory, Department of Rural Sociology, University of Wisconsin-Extension, 1450 Linden Drive, Madison, WI 53706. $5.00.

*County Business Patterns, Wisconsin*. U.S. Bureau of the Census. Employment by industry by county. Published annually. Available from the Government Bookstore, 517 East Wisconsin Avenue, Room 190, Milwaukee, WI 53203. $5.50.

*County Commuting Patterns*. A graphic display of commuting patterns to and from each county. Taken from 1980 Census of Population, 1984. Available from the Government Bookstore, 517 East Wisconsin Avenue, Room 190, Milwaukee, WI 53203. $4.50.

*Education Handbook*. Provided annually by the Wisconsin Career Information System. This handbook contains information on programs of study and the schools that offer them. Over 700 vocational and college programs are detailed. Information on Wisconsin's vocational schools and colleges is also presented along with descriptions of selected schools from adjoining states. This book provides a comprehensive source of information on education and training in Wisconsin and bordering states. Available to consortium members. Contact the Wisconsin Career Information System for fees and publication costs at 1025 West Johnson, 1078 Educational Sciences Building, Madison, WI 53706. (608) 263-2725.

*Employment Review*. A series of narrative and tabular summaries on employment and unemployment in specific areas, comparisons with past trends, labor demand and supply relationships, a report on training activities, and the outlook for each area. Available from local Job Service offices or the Job Service Library, Wisconsin Department of Industry, Labor and Human Relations, P.O. Box 7944, Madison, WI 53707. Free.


*Kids's School*. An update on the demographics of children and their impact on our schools. Available from the Wisconsin State Data Center, Demographic Services Center, Department of Administration, 101 South Webster Street, 6th Floor, Madison, WI 53702. Free.


LMI Glossary: Terms Used in Labor Market Analysis. 1983. This glossary includes the terms commonly used in labor market analysis and in published reports of statistics and labor market information. An alphabetical index is included. Available from the Job Service Library, Wisconsin Department of Industry, Labor and Human Relations, PO Box 7944, Madison, WI 53707. Free.

Occupations Digest. Prepared biannually by the Wisconsin Career Information System. The Occupations Digest includes descriptive information on 400 occupations and is written at the fifth grade level. This book may also be used with individuals who have a low reading level. It is intended as a career exploration resource. It is designed so that persons seeking more detailed information can refer to the Occupations Handbook, which uses the same occupation numbers and titles. Available to consortium members. Contact the Wisconsin Career Information System for fees and publication costs at 1025 West Johnson, 1078 Educational Sciences, Madison, WI 53706. (608) 263-2725.

Occupations Handbook. Prepared annually by the Wisconsin Career Information System. The Occupations Handbook covers over 800 occupational descriptions. Over 400 of these occupations are common to Wisconsin with 250 significant nationally. High technology occupations are also included. Data for this book is synthesised from state and national publications and labor market information data. The format is designed specifically for use in counseling and career development. Available to consortium members. Contact the Wisconsin Career Information System for fees and publication costs at 1025 West Johnson, 1078 Educational Sciences, Madison, WI 53706. (608) 263-2725.

Occupational Statistics Program. This is a series of OES program reports. OES surveys Wisconsin employers in selected industries to obtain current occupational categories of non-farm wage and salary employees. This includes full and part-time employees in occupations for which they were trained. Estimates of employment by occupation within specific Standard Industrial Code groups will be used to develop an industrial-occupational matrix. This matrix will be the basis for projections of future occupational requirements. The surveys are conducted on a three-year cycle. Available from the Job Service Library, Wisconsin Department of Industry, Labor and Human Relations, P.O. Box 7944, Madison, WI 53707. Free.


Planning Information for Employment, Training, and Industrial Development. 1979. Reports show historical development and possible future changes in the labor markets of the state and service delivery areas. Available from the Job Service Library, Wisconsin Department of Industry, Labor and Human Relations, PO Box 7944, Madison, WI 53707. Free.

Population Notes. Brief demographic reports issued periodically. The most current:

American Indians in Wisconsin, 1980. April, 1985. (Number 16)
Wisconsin's Metropolitan Areas. November, 1985. (Number 17)

Available from the Wisconsin State Data Center, Demographic Services Center, Department of Administration, 101 South Webster Street, 6th Floor, Madison, WI 53702. Free.

Population Series. In-depth demographic reports published periodically. The most current:

Demographic Change in Wisconsin: Trends and Outlook. Jan, 1984. (80-1)

Available from the Wisconsin State Data Center, Demographic Services Center, Department of Administration, 101 South Webster Street, 6th Floor, Madison, WI 53702. $5.00 each.

PREP Handbook. Provided annually by the Wisconsin Career Information System. PREP
is a series of exercises to help individuals understand themselves in relation to the world of work. PREP can be used by a group or by an individual. Available to consortium members. Contact the Wisconsin Career Information System for fees and publication costs at 1025 West Johnson, 1078 Educational Sciences Building, Madison, WI 53706. (608) 263-2725.

Using Labor Market Information for Career Decision Making. This handbook is designed to provide a brief but comprehensive explanation of labor market information for career development and career decision making. It uses the Wisconsin Career Information System and other state and federal materials to emphasize and illustrate major points. Counselors, career development specialists, teachers, librarians, and anyone working with career development will find the book useful as a professional reference. Available to WCIS consortium members and others. Contact the Wisconsin Career Information System for fees and publication costs at 1025 West Johnson, 1078 Educational Sciences Building, Madison, WI 53706. (608) 263-2725. Non-consortium members may purchase it for $10.00 from the Publications Unit, 964 Educational Sciences Building, 1025 West Johnson Street, Madison, WI 53706. (608) 263-4357.

Wisconsin Career Information System. Comprehensive occupational and education information system for career exploration, career decision making, and education planning. It is designed especially for Wisconsin. Through its printed materials and microcomputer software, it provides up-to-date educational and labor market information for making career decisions and conducting career counseling. The system provides analyzed data, structured and direct access to information, and numerous other resources for students, clients, and counselors. Available to consortium members. Contact the Wisconsin Career Information System for fees and publication costs at 1025 West Johnson, 1078 Educational Sciences Building, Madison, WI 53706. (608) 263-2725.

Wisconsin Developmental Guidance Programs. Wisconsin Department of Public Instruction, Madison, Wisconsin. 1985. Available from the Wisconsin Department of Public Instruction, Publication Sales, GEF III, 125 South Webster Street, PO Box 7841, Madison, WI 53707. (608) 266-1098. $5.00.

Wisconsin Employment and Economic Indicators. A publication of 30 indicators grouped by business cycle timing, denoting employment, business and economic activity, and demographic information. Contains a narrative report on the state of the Wisconsin economy, and either an information report on a segment of industry or a current statistical analysis. Contains tables and narratives on labor force, unemployment, employment, hours and earnings. Contains selected information on the U.S. Includes tables and graphs. Monthly publication. Available from the Job Service Library, Department of Industry, Labor, and Human Relations, PO Box 7944, Madison, WI 53707. Free.


Wisconsin Occupational Projections to 1990. 1983. This report shows detailed occupational employment to 1990. It is based on the 1990 industry projections (see above). Available from the Job Service Library, Wisconsin Department of Industry, Labor and Human Relations, PO Box 7944, Madison, WI 53707. Free.

Wisconsin Population Projects – Fourth Edition. Population projections to the year 2010 by county, by sex, and five year age groups. Includes births, deaths, and net migration. Available from the Wisconsin State Data Center, Demographic Services Center, Department of Administration, 101 South Webster Street, 6th Floor, Madison, WI 53702. Free.

Wisconsin School District Printout. A series of seven tables for every school district with 1980 census data on population, housing, and social characteristics. Available from the Wisconsin State Data Center, Demographic Services Center, Department of Administration, 101 South Webster Street, 6th Floor, Madison, WI 53702. Free.
Wisconsin Statistics: A Directory of Sources, 2nd Edition. 1980. This directory is an annotated list of reports containing statistical information about Wisconsin. The titles are arranged in broad subject categories with a subject index. The names and telephone numbers of people to contact about the information are included. There is also an indication of the geographic coverage of the data and the presence of selected demographic breakdowns. Available from the Job Service Library, Wisconsin Department of Industry, Labor and Human Relations, PO Box 7944, Madison, WI 53707. Free.


Wisconsin's Elderly. A graphic overview of older persons as a dynamic demographic group. Available from the Wisconsin State Data Center, Demographic Services Center, Department of Administration, 101 South Webster Street, 6th Floor, Madison, WI 53702. Free.

WISPOP - Wisconsin Population Computer Information System. A data base which produces over 60 tables on population, housing, income, poverty, and labor force. Data is available for Wisconsin as a whole, at the county, city, town, and village levels, and in "custom" combinations. Available from the Applied Population Laboratory, Department of Rural Sociology, University of Wisconsin-Extension, 1450 Linden Drive, Madison, WI 53706. On-line subscription: $50.00. One-time subscription fee and $12.00 per connect hour ($24.00 bimonthly minimum). Call-in request: $5.00 per run plus 25 cents per tab! per place.


WSDC NEWS. The biannual newsletter of the Wisconsin State Data Center. Available from the Wisconsin State Data Center, Demographic Services Center, Department of Administration, 101 South Webster Street, 6th Floor, Madison, WI 53702. Free.

Federal Sources


Armed Services Vocational Aptitude Battery (ASVAB) - A Guide for Counselors and Educators, or A Student Guide to the ASVAB Contact U.S. Military Entrance Processing Command, 2500 Green Bay Road, North Chicago, IL 60064. Free.


Career Opportunities in Art Museums, Zoos, and Other Interesting Places. U.S. Department of Labor, Employment and Training Administration. 1980. Provides background information on museums, zoos, and parks, as well as detailed descriptions of current occupations in these fields. Available from the Government Printing Office, 517 East Wisconsin Avenue, Room 190, Milwaukee, WI 53403. $7.00.

occupations within the hotel and restaurant industries, employer's educational and training requirements, and characteristics which may be helpful in performing the job. Available from the Government Printing Office, 517 East Wisconsin Avenue, Room 190, Milwaukee, WI 53403. $5.50.


Census of Population, 1980. U.S. Bureau of the Census. There is a wide variety of data: population, population characteristics, labor force, education. The statistics are contained in four basic volumes:
Vol. 1 - Number of Inhabitants 1982, $4.50.
Vol. 3 - General Social and Economic Characteristics 1983, $6.00.
Vol. 4 - Detailed Characteristics 1984, out of print.
Available from the Government Bookstore, 517 East Wisconsin Avenue, Room 190, Milwaukee, WI 53403.


Environmental Protection Careers Guidebook. U.S. Department of Labor, Employment and Training Administration, and U.S. Environmental Protection Agency. 1980. Provides overviews as well as detailed descriptions of the activities, responsibilities, and educational requirements of the major occupations directly concerned with environmental protection. Available from the Government Printing Office, 517 East Wisconsin Avenue, Room 190, Milwaukee, WI 53403. $7.50.

Available from the Government Printing Office, 517 East Wisconsin Avenue, Room 190, Milwaukee, WI 53403. $10.00.


time required for each of the 12,099 occupations defined in the DOT. Available from the Government Printing Office, 517 East Wisconsin Avenue, Room 190, Milwaukee, WI 53403. $11.50.


**Other Sources**

**Career Opportunity News**. Garrett Park Press. Garrett Park, MD. Published six times a year. Includes current outlook in various occupations, resources to aid job seekers and counselors, special opportunities for minorities, and women's career notes. Garrett Park Press, Garrett Park, MD 20896. $30.00 per year. Single issues $4.00 each.

**Careers, a Guide for High School Students**. E. M. Guild Co., New York. Published three times a year. Gives students current information about career prospects in various fields. E.M. Guild, 1001 Avenue of the Americas, 10th Floor, New York, NY. $2.00 per issue.

**Conversion Table, DOT Industry Designations—Standard Industrial Classification**. Employment Security Commission of North Carolina, Employment Service Division, Occupational Analysis Field Center. 1979. Relates DOT industry designations, which are based on economic or industrial area of activity, to SIC codes, which classify establishments according to type of activity in which they are engaged.


**Emerging Careers: New Occupations for the Year 2000 and Beyond**. S. Norman Feingold and Norm Reno Miller. 1983. A look at the forces that are changing the world of work and the fields in which the changes will be most significant. Garrett Park Press. Garrett Park, MD 20896. $11.95.


**The National Guide to Educational Credit for Training Programs**. American Council on Education, Washington, D.C. Contains credit recommendations for formal educational programs and courses sponsored by non-collegiate organisations whose primary function is not education, but who offer courses to their employees or members. American Council on Education, 1 DuPont Circle, Washington, D.C. 20036. $37.50.

they are, how they affect the individual holding them, and how identifying them can assist in the career guidance process. Available from the National Center for Research in Vocational Education, Ohio State University, 1960 Kenny Road, Columbus, OH 43210. $5.75.


Computer-Aided Guidance


Evaluations of Computer-Based Career Information Delivery Systems: An Annotated Bibliography. Association of Computer-Based Systems for Career Information. Includes 73 citations, coded for topics covered. ACSCI Clearinghouse, University of Oregon, 1787 Agate Street, Eugene, OR 97403. $5.00.

Guidelines for the Selection of Computer-Based Career Information and Guidance Systems. Association of Computer-Based Systems for Career Information. 1985. How to choose the most appropriate system for a given setting. ACSCI Clearinghouse, University of Oregon, 1787 Agate Street, Eugene, OR 97403. $5.00.


Using Information in Career Development: From Cognition to Computers. Leonore W. Harmond (editor). 1983. A compilation of three papers investigating theoretical and practical facets of career development and their role in the formation of computerised career development systems. Available from the National Center for Research in Vocational Education, Ohio State University, 1960 Kenny Road, Columbus, OH 43210. $4.25.
Perfect information is a term used in the decision making literature to describe a condition where everything is known about a specific decision to be made. This condition probably never exists when making career choices. But when do you arrive at the condition where you have enough information? When do you have the “right facts”? Making up your mind is hard to do!

Getting enough of the right information is indeed a problem. But there is another problem. Mark Twain once said, “It ain’t the things you don’t know that gets you in trouble, it’s the things you know for sure that ain’t so.”

Well, Mark Twain was half right. It is true that your misperceptions, your faulty beliefs, get you in trouble. But the things you don’t know can also get you in trouble. This is certainly true when dealing with information about the labor market. The effective counselor should always keep in mind these two potential problems related to using labor market information in career decision making:

- lack of information
- faulty information

It is probably easier to discover the kinds of labor market information clients do not have than it is to find out what they “know for sure that ain’t so.” However, there are some things counselors can do.

Remember, labor market information is information about workers and jobs. It is descriptive and statistical. Counselors should help clients to be sure they have all combinations of labor market information:

- Descriptive/Workers
- Statistical/Workers
- Descriptive/Jobs
- Statistical/Jobs

Lack of statistical data about workers or jobs before choosing a particular job could “get you in trouble.” And the same is true about faulty descriptive information. Using the above combinations during counseling could help avoid either deficit. Perfect statistical or descriptive information about the labor market is impossible to get. But a wise decision maker will get as much of each as is appropriate in each decision.

TWELVE SAMPLE CASES

The following are abbreviated illustrations of fictitious case histories. They are intended to be examples of a variety of counseling situations that may apply to a variety of clients. The use of labor market information and its potential sources is illustrated in the context of these counseling cases.

A brief abstract of each of the twelve cases follows:

1. Leslie: A displaced homemaker seeking a career and work for the first time in thirty years.
2. Sam: A displaced factory assembly line worker, 57 years old, without skills or education.
3. Del: A high school senior, planning his career.
4. Tracy: A registered nurse who has relocated, seeking a local nursing job.
5. Sally: A technical illustrator, unsatisfied with her job, wants to change careers.
6. Roger: A truck driver, injured on the job, must find new work.
7. Bill: A school dropout looking for a job, but unsure of the kind of work he would like.
8. Kim: An elementary school student becoming aware of the world of work.
9. Jack: A junior high/middle school student selecting and making high school plans for classes and a career beyond.
11. Fred: A high school junior with a physical handicap.
12. Mary: A graduating senior making career plans.

The case studies that follow are not intended to be models of exemplary counseling techniques, or even totally realistic situations. But they do illustrate a variety of career counseling needs.
Leslie Sullivan, a homemaker for 30 years, is recently divorced. She is 49 years old and has never been employed for pay. Her youngest child lives at home and is a junior in high school. Leslie has been able to keep her house of 25 years by using her divorce settlement, but she must assume mortgage payments. Her child support and alimony payments have been irregular and she worries about losing them completely. She has no other income. She has a high school diploma and thinks she would like to take a typing course at the local vocational school. She is not sure about the kind of work she would like to do, or could do, and is worried about her daughter being home alone after school. She needs income right away but is worried about being tied down to a demanding job. She is an avid gardener and enjoys making her own clothes.

I. Personal Issues
1. Income needs
2. Orientation to work
3. Daughter's independence

II. Labor Market Issues
A. Exploration issues
1. Identify interests
   a. Identify trial work experience
   b. Strong-Campbell Crosswalks
2. Identify skills
3. Learn about occupations
4. Set goals

B. Placement issues
(None at this time)

III. Use of Resources: Exploration
A. Actions
1. Identify interests. Took the Strong-Campbell standardised interest inventory purchased from publisher.
2. Identify skills. Used the Form E version of the Micro-SKILLS worksheet and the WCIS microcomputer program.
3. Learn about occupations. Used the WCIS Crosswalk to find a list of occupations to match her Strong-Campbell score.
   Studied the WCIS Occupations Handbook, looking up occupations from the Crosswalk Directory and the Micro-SKILLS printout.

B. Results
1. Identified interest areas and work areas related to personality factors.
2. Analyzed past work experiences and identified 35 of the most satisfying skills; got a list of occupations to match skills.
3. Learned about many interesting occupations. Particularly liked those dealing with plants in the 5500 SOC group.
   She is looking into sales jobs—especially those that deal with plants.

IV. Placement
1. Trial work experience. Wants to try a part-time job with a nursery, called the local Job Service office.

1. Job Service reported three possible openings. She also checked the Yellow Pages for possible contacts.
Sam Harris worked as an assembly line worker in an auto plant in Wisconsin for 18 years, until the plant closed down. He and his wife, Faye, own their home and have raised four children. Sam has always made a good income so Faye has never had to work. They are both 57, have high school diplomas, and do not want to leave their hometown. Sam’s outside interests are hunting and fishing, and Faye has been active in their church. There is not enough money in Sam’s pension to live on if he takes early retirement. Unemployment compensation has run out. Sam still feels that something will turn up and wants to “wait it out and see.” He does not want Faye to work. He is spending more and more time at the local tavern with his friends from the plant.

I. Personal Issues
   1. Unemployment
   2. Income support
   3. Re-orientation to work
   4. Possible alcohol abuse

II. Labor Market Issues
   A. Exploration issues
      1. Identify interests
      2. Identify transferable work experience
      3. Explore occupations that may be suitable
      4. Decide if training is necessary or desired
      5. Set goals/evaluate motivation
   B. Placement issues
      (None at this time)

III. Use of Resources: Exploration
   A. Actions
      1. Identify transferable skills. Use Micro-SKILLS automatic processing form.
      2. Identify transferable work experience. Use Computer Questionnaire with the WCIS Full System Micro version.
      3. Explore occupations. Used WCIS Occupations Handbook to read about the occupations listed on both computer printouts.
      4. Training. Using WCIS Occupations Handbook education references and sections on entry requirements and how to get ahead, was able to see which occupations required further training.
      5. Set goals/evaluate. Discussed options with counselor.
   B. Results
      1. Micro-SKILLS showed the skills used by an assembly line worker and listed alternative careers.
      2. Looked at the requirements of job as assembly line worker, identified what he liked best about his old job, and got a list of occupations to match his preferences.
      3. Liked some of the occupations described.
      4. Most occupations required some further training.
      5. Wants to think about options and talk with his wife.
Del

(College-Bound High School Student)

Del Brown is a senior at Stevens Point Senior High School and his grades are high enough to get into any Wisconsin college. His family lives on a dairy farm that has been in the family for three generations. He has always helped out with chores and has worked summers doing whatever needed to be done. His parents do not want him to go into farming. They want him to become a physician like his uncle. He would like to do something related to farming that does not involve the long hours and financial risks. He is not interested in agribusiness. He enjoys being outside a great deal and wants to stay in the Stevens Point area.

I. Personal Issues
   1. Establishing independence
   2. Becoming more self-aware
   3. Finding a satisfying career

II. Labor Market Issues
   A. Exploration issues
      1. Identify interests
      2. Identify occupations
      3. Choose post-high school education
   B. Placement issues
      1. Identify schools
      2. Compare and decide

III. Use of Resources: Exploration
   A. Actions
      1. Identify interests. Filled out *Computer Questionnaire* #2, items 1-5. On WCIS Fall System Micro program, entered these items, then entered four agriculture and environmental majors (one at a time). Got a list of occupations for first major, then removed that major from list and entered second one. Got another list and removed the major. Entered third one, etc.
      2. Identify occupations. Using occupation numbers on the printout, he printed out occupation descriptions of favored occupations to study.
      3. Choose major. Narrowed choice down to two majors and will look for schools offering both. That would allow him to keep his options open until he can learn more.

(continued on next page)

B. Results
   1. Identified several occupations he liked. Discovered that two of the four majors had more interesting occupations related to them.
   2. Really liked occupations associated with two majors.
IV. Placement

1. Find possible choices. Used the “all-selector” search on the Full System Micro program to find schools offering both majors.

2. Compare and decide. Still using Full System Micro search, got information about the schools. Also compared information on following topics:
   - entrance requirements
   - costs
   - location
   - unique school strengths
   - financial aids available
   - placement services
   - size of school

3. Choose school. Using addresses on printout, he wrote each of the three schools asking for information about the programs of study.

1. Found three in-state schools offering both majors.

2. Found that the school nearest him offered sports he liked and had lower costs than the others.

3. Liked the programs offered by the school closest to him and is applying there.
Tracy Miller, a registered nurse, has just moved to Eau Claire to live with her mother who is getting too old to live alone. She is looking for work and needs to make enough money to support herself and help pay for medical bills for her mother. She must also have a job that will allow her to adjust her hours from time to time when her mother is ill. She has registered with the state of Wisconsin and is ready to begin work today.

I. Personal Issues
   1. Finding a place to live
   2. Money to live on until job provides support

II. Labor Market Issues
   A. Exploration issues
      (None at this time)
   B. Placement issues
      1. What are the local opportunities for nurses?
      2. What are the pay scales?
      3. Where are the openings in this area?

III. Use of Resources: Exploration

IV. Placement
   A. Actions
      1. What are opportunities for nurses?
         Used WCIS Occupations Handbook for number of openings expected, and outlook by area of the state. Used DILHR Resources for number of places that hire nurses (through SIC Code).
      2. What are the pay scales? (See sample Occupational Description in Appendix A.) Used WCIS Occupations Handbook for Wisconsin pay range. Used OOH, GOE for further national information regarding salaries.
      3. Where are the openings in this area?
         Called Job Service to check.
   B. Results
      1. 23,033 = number of openings expected in period 1980-90.
         Outlook is fair across the state; better in rural areas.
      2. In Wisconsin the salary range is $14,000 - $19,000/year.
         Nationally, the range is $12,000 - $30,000 per year according to WCIS.
      3. Job Service showed two current RN job listings. She went to Job Service to submit her application.
Sally
(Mid-life Career Change)

Sally Ellison is 44 years old and has worked as an advertising illustrator for 12 years. She enjoys graphics and likes the people she works with, but is ready to do something different. She has talked with her boss, but there are no opportunities with her present company. She does not want to go back to school. She wants to use her design skills but wants more contact with people and greater variety in her work. She lives in this area and wants to stay here near friends and family. She is a single parent of a 5-year-old, so she needs to make a good salary.

I. Personal Issues

II. Labor Market Issues
   A. Exploration issues
      1. Identify interests
      2. Identify skills
      3. Identify values
      4. Get information about occupations
      5. Determine salaries for different jobs

   B. Placement issues
      1. What jobs are available?
      2. Is training available?
      3. Is financial aid available?

III. Use of Resources: Exploration
   A. Actions
      1. Identify interests. Use WCIS "Jiffy Work Experience Inventory" and Full System Micro program.
      2. Identify skills. Use WCIS Micro-SKILLS, entering the same experiences listed in Jiffy, then identify the skills used.
      3. Identify values. Used WCIS PREP booklet.
      4. Get information about occupations. Used references from printouts to WCIS Occupations Handbook and OOH to learn what people in listed occupations do.
      5. What do different jobs pay? Using same resources from WCIS and OOH, got national and Wisconsin salary information.

(continued on next page)
IV. Placement

1. What jobs are available? Using DILHR resources like Community Business Patterns, got information on industries in the area.
   Used DOT numbers and SIC Code to generate a list of industries that hire allied health personnel.
   Used Yellow Pages and manufacturing guide to get names and addresses of organisations that hire health personnel.
   Called Job Service to see if any organisations are hiring.
   Called personnel departments directly to see if they have openings coming up.

2. What training is available? Used WCIS Education Handbook to get a listing of schools that offer particular training programs. (See sample programs of study in Appendix A.)

3. Is there any financial aid? Used WCIS Education Handbook to learn about types of financial aid programs offered by the school.
   Used WCIS Financial Aid Workbook and Financial Aid SCAN.

   1. She then identified those closest to her home as prospects for making application to.

   2. Found a school in her area that offered three of the programs she was considering.

   3. She had the names of several financial aid programs to inquire about when she visited the financial aid officer at the school.

      Gathered information needed to qualify for financial aid.
Roger
(Job Retraining for Disabled Worker)

Roger Smith, a truck driver for over 18 years, is no longer able to perform the job due to back and neck injuries suffered in an accident. Roger has always enjoyed trucking, which is the only kind of work he has ever done. As a teenager, he developed an interest in fixing old cars and knows quite a bit about mechanics and body work. Now, he is quite depressed because he cannot do any bending and lifting. He says he cannot drive, cannot work as an auto or truck mechanic, and needs a job right away.

I. Personal Issues
1. Depression
2. Unemployment
3. Re-orientation to work
4. Needs to identify extent of impairment from injury

II. Labor Market Issues
A. Exploration issues
1. Identify skills from past experience
2. Find related occupations he is capable of performing.
3. Can he find occupations that pay enough to support him?
4. Will he need training?

B. Placement issues
1. Identify possible local companies/industries in area.
2. Are there any openings?
3. Where can he get training?

III. Use of Resources: Exploration
A. Actions
1. Identify skills from past experience. Used Micro-SKILLS Worksheet Easy Reading Form E.
2. Find related occupations he is capable of performing. Using Micro-SKILLS, asked for information for the occupations that sounded most attractive.
3. Can he find occupations he likes that pay enough to support him? Using information from Micro-SKILLS, he got references to the WCIV Occupations Handbook, OOH, and GOE.

(continued on next page)
IV. Placement

1. Identify possible local companies (industries) in the area. Using DOT references from Micro-SKILLS and the SIC Classified Code got SIC code numbers of related industries, or using OOH and WCIS got names of related industries.

2. Are there any openings? Contacted Job Service and/or local industries directly. (Used Manufacturer's Guide or Yellow Pages.)

3. Where can I get training? Used the educational references from the WCIS Occupations Handbook. Checked Programs of Study information in the WCIS Education Handbook.

1. Used Community Business Patterns, Yellow Pages, or Chamber of Commerce publications to get names of businesses.

2. Got a listing of specific companies to contact.

3. Got listing of schools that offered the training in desired areas. Got information about schools regarding entry requirements, fees, financial aid, services, etc.
Bill
(High School Dropout)

Bill Williams is 19 years old and is a high school dropout. Bill finished his junior year in high school and took a job with a paving contractor for the summer. He is not a good student and is adamant about not going back to school. He is anxious to be out on his own. He is willing to do anything. Bill does not want to leave Wisconsin and, if he can find work here in his hometown, he would like to stay there.

I. Personal Issues
   1. Independence (moving out)
   2. How to support himself

II. Labor Market Issues
   A. Exploration issues
      1. Identify interests
      2. Get occupational information.
      3. Consider going back to school to get a better job.
      4. Identify values

   B. Placement issues
      1. Bill does not want to move out of Wisconsin
      2. If he decides to go back to school, can he work and go to school in the evenings and weekends? What programs are available?
      3. Should he worry about being replaced by a robot someday?

III. Use of Resources: Exploration
   A. Actions
      1. Identify interests. Used PREP booklet to relate past experiences to interests.
      2. Get occupational information. Used Career Scan to match occupations to interests. With references from Career Scan, used WCIS Occupations Handbook, OOH, Environmental Careers, and other DOL publications to get information on occupations.
      3. Would going back to school help him get a better job? Used Career Scan to do a search with interests. Included "less than H.S. diploma," selector. Did another search with same interests and "vocational training" selector.
      4. Identify Values. Used pages 38–39 in PREP.

   B. Results
      1. Learned about self and how to describe his interests.
      2. Got a list of occupations to match his interests.
      3. He found more occupations he liked with vocational training than those requiring "less than high school diploma."
      4. Narrowed his preferences for occupations from computer search lists to the top five occupations.

(continued on next page)
IV. Placement

1. Move out of Wisconsin. Use WCIS Occupations Handbook, OOH, other references from Career Scan to find national outlook for five top occupations.

2. Weekend training programs. Used educational references from WCIS Occupations Handbook to WCIS Education Handbook to get names and numbers of programs of study. Used Education Handbook descriptions of schools to find those offering the training after regular working hours.


   1. Four of the occupations had a good outlook, one had a poor outlook.

   2. Found training programs for the occupations and the schools in his region offering them.

   3. The occupation with the poor outlook has a higher probability of being taken over by robots. He also learned he should become more familiar with computers.

---

Kim

(Elementary School Student)

Kim Frandey is in the 3rd grade at Governor Elementary School. Next week, her school is having a career day program and she must choose two sessions to attend. Her friend's mother works in a hospital and will be a speaker. Her parents work in offices, but she is not sure what they do besides talk on the phone.

I. Personal Issues

None

II. Labor Market Issues

A. Exploration issues

   1. Awareness

III. Use of Resources: Exploration

A. Actions

   1. Awareness. Kim's teacher used the new WCIS materials for elementary grades in preparation for planning a Career Day project. One activity involved students looking at their favorite TV program to find as many different occupations as they could. They talked about them in class. They read about some of the occupations in the WCIS Occupations Digest.

B. Placement issues

   None

B. Results

1. Students were able to make better choices on what activities to attend on Career Day because they knew more about what people do. Some students suggested occupations for Career Day. Kim was surprised to hear from other children that they had seen so many different occupations. The next time she watched her programs, she was much more aware of all of the occupations illustrated. At the next group discussion she was able to describe more occupations.
Jack (Middle School Student)

Jack Sims is in 7th grade at Kennedy Middle School. He enjoys helping his father repair small appliances in his shop. He has also been active on athletic teams and collects transformers. Jack is an A student in school and his mother wants him to go to college. Next week, he has to write a report about his career interests for his English class. His school has WCIS but he has never used it.

What materials should Jack use and what might he learn?

I. Personal Issues

   None

II. Labor Market Issues

   A. Exploration issues
      1. Identify interests
         Counselor did some group classwork using WCIS. Jack used the PREP booklet to help identify his interests.
      2. Match to occupations
         Used Career Scan. Took interests identified in PREP and got a computer listing of occupations to match.
      3. Get information about occupations
         Checked out the WCIS Occupations Handbook and got information about each occupation.
      4. Follow up
         His teacher helped him identify local people in the occupations for him to talk to about their work.

   B. Placement issues
      None

III. Use of Resources: Exploration

   A. Actions
      1. Identify interests. Counselor did some group classwork using WCIS. Jack used the PREP booklet to help identify his interests.
      2. Match to occupations. Used Career Scan. Took interests identified in PREP and got a computer listing of occupations to match.
      4. Follow up. His teacher helped him identify local people in the occupations for him to talk to about their work.

   B. Results
      1. Learned about himself and how his interests apply to occupations.
      2. Found several occupations he liked on the list.
      3. Wrote report using information in books.
      4. The teacher arranged a job shadow experience with a local volunteer.
Susan
(High School Parent)

Susan Davidson is in 12th grade and is the mother of a 3-month-old son. The child's father has not associated with them and no longer lives in the same state. Susan has better than a B average in school in spite of many absences during the past year. She would like to finish high school and get training to work in the medical field. Her parents are on Social Security Disability income but have offered to help with childcare as much as they can. Susan has been an office helper at school for a year and is considered dependable and hard working. She likes the work. She would like to move into her own place because her parents "are so conservative." She is afraid she will never get off AFDC.

I. Personal Issues
   1. Living arrangements/feasibility of moving out
   2. Steady income
   3. Child care
   4. Personal goals

II. Labor Market Issues
   A. Exploration issues
      1. Get information about different options for medical careers.
      2. Identify preferred choices.
      3. Set tentative goals based on outlook, salary requirements, etc.
   B. Placement issues
      1. Where is training available?
      2. Is training feasible for her?
      3. Can she qualify?
      4. Decide

III. Use of Resources: Exploration
   A. Actions
      2. Identify preferred choices. Used SCAN and SCAN Worksheet to search group 2900.

(continued on next page)
IV. Placement

1. Where is training available? Used School Scan to look for schools nearby offering training for the occupation.

2. Is training feasible? Used information from School Scan regarding costs, entrance requirements, financial aid, etc.

3. Can she qualify? Used information from School Scan regarding SAT/ACT scores and talked to counselor at school.

4. She decided to talk with teachers about the different programs and the placement service offered by each school. She used the WCIS Financial Aid Workbook to help apply for financial aid. She used Financial Aid Scan and found she would probably qualify for a Pell Grant.

1. Got a listing of schools for each training program.

2. With financial aid for tuition at a school near home, further education became a possibility.

3. School counselor thought she could qualify, based on class rank.

4. She decided she could do it.
FRED
(High School Student with Disability)

Fred Jamieson has been in a wheelchair all his life with no use of his legs. He will be a junior in high school next year. He has a C+ average, a good attendance record, and is considered to be a hard worker. He wants to go to the local vocational school when he graduates, but does not know what career would be best for him. He has many friends and likes to play rock music on his walkman radio. This year in school, he learned to make computer graphics and thinks they are great. He and his dad fight a lot, and he gets depressed thinking he may have to live with his parents for the rest of his life.

I. Personal Issues
   1. Establishing independence
   2. Getting along with father

II. Labor Market Issues
   A. Exploration issues
      1. Identify values/interests
      2. Match to occupations
      3. Explore different options
      4. Plan trial experiences
   B. Placement issues
      None

III. Use of Resources: Exploration
   A. Actions
      1. Identify values/interest. Used PREP booklet.
      2. Match to occupations. Used SCAN Workbook and worksheet.
      3. Explore options. Used WCIS Occupations Handbook to read about different occupations.
   B. Results
      1. Scored high on PREP in “visual perception” and “working with things.”
      2. Matched interests to occupations in 3700 SOC group (technicians and technologists) and the 6000 group (mechanics and repairers).
      3. Learned that some occupations he liked require more education and training than others; that job opportunities differ; and that pay ranges differ.
      4. He received first-hand experience as a helper in an electronics repair facility.
Mary
(High School Student)

Mary Feather has always helped her father in his carpentry shop. She is very good at it and enjoys the work. Business has not been good in the last few years and her father is planning to retire and close down his shop. Mary will finish high school next year and has no further plans. She has a "C" average and would consider further schooling if she knew what she wanted to do. Her boyfriend thinks she should do something more “ladylike” than carpentry. He wants to get married and move to Milwaukee, but she is not sure. She has done some baby-sitting but did not like it. She was very active in the DECA program in school and won some awards this year in sales contests. She enjoys being outdoors.

I. Personal Issues
   1. Independence
   2. Marriage
   3. Financial independence
   4. Sexuality issues

II. Labor Market Issues
   A. Exploration issues
      1. Identify interests
      2. Identify values
      3. Identify skills
      4. Explore appropriate occupations
      5. Identify training requirements
      6. Set goals

   B. Placement issues
      1. Investigate options in different labor markets
      2. Identify her labor market (decide where she wants to live: i.e., hometown, Milwaukee, or other state)

III. Use of Resources: Exploration
   A. Actions
      1. Identify Interests. Took COPS standardized interest inventory, then used WCIS Crosswalk.
      2. Identify values. Used the Value Exercise in the PREP booklet to compare her values with the life-styles associated with each occupation.
      3. Identify skills. Used the MicroSKILLS cards to identify her most satisfying skills, then used the MicroSKILLS microcomputer program to get a list of the 30 best-matching occupations.
      4. Explore occupations. Used WCIS Occupations Handbook to examine job opportunities, salary, training requirements, etc., for the occupations on her list.

(continued on next page)
III. Use of Resources: Exploration (cont'd)

5. Identify training requirements. Used references from the occupational descriptions in the WCIS Occupations Handbook and the WCIS Education Handbook to learn about training, schools, costs, and entry requirements.


IV. Placement

1. Investigate options in various labor markets. Mary talked with her counselor about the information on outlook from the WCIS Occupations Handbook and DILHR publications such as County Business Patterns.

2. Identify her local labor market. She discussed her findings, decisions, and feelings with her counselor. This included the need to work during her training.

5. She found that she could live at home and attend a nearby school that would train her for an occupation that matches her interests, values, and skills. It is an occupation with a good outlook for job opportunities in Wisconsin.

6. Applied to schools for financial aid.

1. She learned where the best opportunities in Wisconsin were for her career choice.

2. She discovered that her chances were good for getting a part-time job in a related industry while she attended school. This experience would help her find a position when she completed her training.
A Word to the "Unwise"

There are two kinds of people who make career decisions:

1. Those who always use a rational, logical, systematic, wise process.
2. Everyone else.

Most career decision making theories and most career guides describe the first kind of people. The realities of everyday job choices and typical career counseling cases describe the second kind.

Wise decision making does not always mean rational, logical, scientific decision making. Often, some aspects of career choice are imprecise, ambiguous, and defy conventional logic. "Fussy thinking" and "muddling through" may sometimes be appropriate, even necessary, decision strategies. But people can learn to improve their muddling.

Fussy thinking has been defined as "rational thought tempered by intuition." Wise fussy thinking is employed when precision is not possible or desired. Muddling through was invented by Roger Golde as the "art of proper unbusinesslike management" to bridge the gap between management theory and the realities of life in most business organizations. We need something to bridge the gap between career decision theory and the realities of the job choice.

Management by objectives (MBO), like career decision making, is not always a science. We are taught that managers make decisions and lovers choose. The former implies mastery, the latter conveys a selection in which we gain some things by giving up others. Perhaps we should think of career choices more like lovers' choices: We are not always in command of all the facts, aware of all the options, or carefully matching self-concept with our choices.

Bridging the gap between theory and reality may mean that career counselors will need to help clients cross some bridges and burn others. But eventually clients must learn how themselves: how to decide, how to choose, how to muddle. Career clients will need to learn how to decide like managers and how to choose like lovers. And to know the difference. This counselor handbook has provided a practical framework and practice for helping clients learn how.

---

6 Golde, Roger A. Muddling Through. 1979. AMACOM
I AM ESPECIALLY INTERESTED IN THESE AREAS:

- General WCIS Products/Services
- Microcomputer Programs
- Special Materials for Jr. High / Middle School
- Job Hunting Aids

Send me more information about the
WISCONSIN CAREER INFORMATION SYSTEM

Name ____________________________
School __________________________
Address __________________________
City/State/Zip _____________________
Phone ____________________________

WI CAREER INFORMATION SYSTEM
University of Wisconsin-Madison
1025 W. Johnson, 1078 Ed. Sciences Bldg.
Madison, WI 53706
Phone: (608)263-2725

Name ____________________________
School __________________________
Address __________________________
City/State/Zip _____________________
Phone ____________________________

WI CAREER INFORMATION SYSTEM
University of Wisconsin-Madison
1025 W. Johnson, 1078 Ed. Sciences Bldg.
Madison, WI 53706
Phone: (608)263-2725
Wisconsin Career Information System
1078 Educational Sciences Unit 1
1025 West Johnson Street
Madison, Wisconsin 53706
Tel: (608) 263-2725
Appendix A

Annotated Guide to Using WCIS Materials for Occupational and Educational Information

This Appendix reproduces the majority of the contents of the Wisconsin Career Information System publication, OCCUPATIONS DIGEST, OCCUPATIONS & EDUCATION HANDBOOKS: An Annotated Guide.

Shown here are sample pages taken from the OCCUPATIONS HANDBOOK and EDUCATION HANDBOOK. Some explanatory annotations have been placed on the samples, also.
Purchasing Managers

Purchasing managers plan and coordinate buying activities for a store or company. They supervise the work of buyers, purchasing officers, and other workers who order and buy materials, products, or services needed by the store or company. These items may be needed for operations in a business or as merchandise to be resold in a store. Purchasing managers also review purchase orders and requests, decide the amount of goods to be stocked, set prices for goods, and set up contracts with supply houses. These jobs generally involve a standard 30-40 hour work week. Some jobs may require some buying trips and overtime.

Work locations include shiplines, retail companies, and manufacturers.

Titles from the DICTIONARY OF OCCUPATIONAL TITLES include: manager, procurement services; superintendent; manager, merchandise.

EMPLEYMENT OUTLOOK IN WISCONSIN:
Number Employed in 1990: 1,268
Number Expected to be Employed in 1995: not available
Expected Openings 1990-1995: not available
This is a small occupation in Wisconsin.

RELATED INFORMATION:
For related jobs, see:
600 EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL OCCUPATIONS

PUBLIC RELATIONS MANAGERS

People in these jobs manage marketing, sales, advertising, or public relations departments in businesses and other organizations. They plan, organize, and direct departmental activities; train, supervise, and evaluate staff; and deal with business and other groups to promote sales. They study sales records and prepare reports. They work for advertising agencies, printing and publishing companies, retail stores, utilities, hospitals, insurance companies, and large corporations.

Titles from the DICTIONARY OF OCCUPATIONAL TITLES include: manager, promotion; account executive; manager, public relations.

EMPLEYMENT OUTLOOK IN WISCONSIN:
Number Employed in 1990: 1,268
Number Employed in 1995: not available
Expected Openings 1990-1995: not available
See the following occupations for detailed Wisconsin-based information: 1250A.
There is no "starting salary" for directors. Some public relations executives start up to $15,000 a year depending on public relations occupations. Most managers are experienced workers and salaries may be lower.

**Salary Information in Wisconsin**

- Starting salary: $12,000 to $15,000 a year
- Median salary: $22,000 to $35,000 a year
- Average salary: $30,000 to $45,000 a year
- Top salary: $60,000 to $75,000 a year

**Employment Outlook in Wisconsin**

- Employment growth is expected to be good for the near future.
- Job opportunities are expected to be available.

**Regional Information**

- See Regional Map on Back Cover

Other sources of information:

- *Exploring Careers* (current edition)

For more information, visit the U.S. Department of Labor's Occupational Outlook Handbook online.
This high technology major group is described and then broken down into 3 work areas.

You saw a reference to this in occupation 1245 under "future impact of technology."

High Technology Area 600
Computers in Information Processing

RELATED WORK AREAS
601 Computer Support Services
602 Office: Clerical
603 Office: Management

GENERAL DESCRIPTION OF AREA
We are changing from an industrial society to an information society. The amount of available information is increasing rapidly. Many occupations are changing from material handling to information handling. Computers have made this transition possible. Computers can manipulate information with great speed and efficiency. The speed at which computers can store, sort, and change data makes them extremely useful in many occupations.

Businesses are using computers to store information concerning products, marketing trends, client records, and company records. This allows businesses to process orders quickly, analyze financial trends, and increase the efficiency of office procedures. Schools are using computers to store student information, process student applications, and grade exams. Schools are also using computers as learning tools at all levels of instruction.

Computers are also used in various types of research. Information is stored on computers, and the data is analyzed to determine if unrelated pieces of data have anything in common. Computers can also organize data very quickly, making it possible for the researcher to work with large amounts of data.

Because computers are changing the way many businesses operate, many workers will need to be retrained. They will need to be familiar with computer systems and be able to use them, whether or not they are directly employed in an information occupation. One of the most common uses of computers is in word processing. A word processor allows the user to compose, organize, and edit text on a video display screen before the text is printed on paper. This greatly increases the efficiency of information processing. These devices are easy to use, and it takes comparatively little time to learn operating procedures.

Creating graphics is another common use for computers. Graphic displays are especially useful in organizing visual presentations. The computer program can arrange information so that it can be displayed or printed in picture form instead of text.

This high technology area discusses three computer work areas. The "Computer Support Services" work area examines electronics, sales and marketing, programming, equipment service, and training. The next area, "Office: Clerical," includes the use of computers by secretaries and librarians. The third area, "Office: Management," discusses the application of computers in a business setting.

601 Computer Support Services

DESCRIPTION - CURRENT STATUS:
Computer support services include computer programming and user education. Services also include design of computer hardware equipment, hardware maintenance, and sales. Sales involves marketing computer devices and programs. Technical communications ability is extremely important. Salespersons must be able to explain computer functions to a wide variety of clients, both experienced and new users.

Different computer applications also need to be explained to clients. These applications range from entertainment to business. Different applications require different types of equipment and programs.

Other types of support services involve repair of equipment and customized programming for individual needs. Services will also include consulting with users to help expand the uses of computer systems.

DESCRIPTION - FUTURE:
The demand for workers in computer-related occupations will increase.

IMPACT ON WORKERS:
At more organizations rely on computers, additional computer-related workers will be needed. Software engineers and programmers will be needed to design and write computer programs. In general, programmers work individually on programs, while software engineers work in teams to write more advanced and complex systems of programs. In private industry, programmers are called upon to do maintenance work on programs, such as modifying an existing program to make it more efficient, or to update a program in the needs of a business change. The demand for programmers may be tempered by several technological advancements. Software is long

HIGHER TECHNOLOGY
600-601

This is the first work area in the "Computers in Information Processing" major group.
designed that is "user friendly." That is, it is not necessary to have a computer background to use it. Computer industries are redesigning computer equipment (hardware) to make it easier to program. The memory chips of microcomputers will be modified to make it easier for customers to build their own software systems by stringing together sets of semi-conductor chips.

Another computer-related area where workers are needed is consulting. People are needed to market software and/or information processing services to others. Software development and marketing is an important industry. New occupations and businesses are emerging in the software area. One occupation is a "software searcher." These workers assist individuals and businesses in determining the appropriate software for their computers. Technical communication skills are very important. Some large corporations have departments that evaluate software. Software directories catalog thousands of programs. These directories must be produced and marketed. New companies selling data base software searches have opened. Clients pay an annual subscription fee to have access to a software data base. (A data base is a collection of related information organized for easy access and processing.)

Training will be a critical task in the next few years. The training will be provided by many different means: hardware and software manufacturers, retailers, independent computer-education centers, corporate in-house training programs, public and private schools and universities, and consultants. Public school systems in many states are requiring computer literacy as a prerequisite for high school graduation.

SKILLS AND COMPETENCIES:
Workers in computer support services must have a strong technical knowledge of computers. They also must have the ability to communicate with those who use the equipment or programs. Technical communication abilities will become increasingly important.

REFERENCES:
"A Look into Computer Careers" American Federation of Information Processing Societies Arlington, VA 22209

American Society for Information Science
Washington, D.C. 20036


Information Industry Association
Washington, D.C. 20000

"Your Career in Data Processing" Data Processing Management Association Park Ridge, IL 60068

WCIS OCCUPATIONS AFFECTED:

DESCRIPTION - CURRENT STATUS:
Equipment that can assist with clerical tasks and handle massive amounts of data is valuable to organizations that turn data into usable information. A word processor will have the greatest effect on changing the operations of secretaries or typists. A word processor is similar to a typewriter. It is a microcomputer with software that can correct spelling, electronically erase errors, close holes left by deleted words and phrases, and store written documents. It is superior to a typewriter when writing and revising material. Computer graphics are also used in organizing presentations.

DESCRIPTION - FUTURE:
A mainframe computer is a large computer that has terminals connected to it by a telecommunications line. The massive amounts of data stored and processed in a mainframe are reused by data entry operators using the terminals. Some may work at computer centers. Workers may have flexible work schedules. Some staff may work in their homes, using the telephone to connect to the main computer in the office.

Computers can provide an electronic mail system. That is, a computer network can be used to write, send, and receive messages or letters. Instead of taking several days to send and receive mail, it can take only a few minutes.

Computerization will have several effects on libraries. There will be more centralized, shared cataloging systems, direct customer access to on-line terminals, and increased use of data bases for on-line searches. The on-line access to bibliographic data will change research and library sciences.

IMPACT ON WORKERS:
By 2010, librarians will no longer be cataloging in workrooms. This procedure will be replaced by use of a computer in an office, in the library, or at home. Most librarians will work at home, locating the resources desired by a particular user or organization via remote terminals.

SKILLS AND COMPETENCIES:
Word processing skills and the ability to use data bases will be required.

WCIS OCCUPATIONS AFFECTED:
Developments in this work area are expected to have a
These are excerpts from vocational programs that you will see in occupation 1250A Public Relations Manager.

PROGRAMS 150-153

150 Marketing (2-year associate degree)

DESCRIPTION OF PROGRAM:
Marketing programs train individuals to work in buyers and sellers in a wholesale or retail establishment. They need to determine which various kinds of merchandise are available in sufficient quantity and have sufficient appeal to sell rapidly and profitably. Buyers/sellers assess merchandise quality, negotiate prices, establish markups for resale, maintain stock, and help sell merchandise.

COURSES:
Courses may include marketing theory, salesmanship, business math, layout and inventory, visual merchandising, advertising, business law, credit, and economics.

SCHOOLS OFFERING PROGRAM:
(Excerpt program description, courses, and/or title may differ for these schools.)
55 Broadview College-Milwaukee
190 Blackhawk Technical Institute-Janesville
104 Fox Valley Technical Institute-Oshkosh
177 Lakeshore Technical Institute-Cleveland
531 Waukesha Technical Institute-Waukesha
304 Milwaukee Area Technical College-Waukesha
215 Milwaukee Area Technical College-Oshkosh
277 Mid-State Technical College-Waukesha
288 Northland Technical College-Two Lakes
304 Horsham Technical College-Bloomington

151 Marketing-Communications (2-year associate degree)

DESCRIPTION OF PROGRAM:
Marketing-communications programs train workers to help customers prepare written and visual advertisements. They may take advertising orders, write copy, develop graphic display art, and handle billing and credit accounts.

COURSES:
Courses may include sales, marketing, advertising, graphics, copy writing, visual merchandising, business law, accounting, and advertising production techniques.

SCHOOLS OFFERING PROGRAM:
(Excerpt program description, courses, and/or title may differ for these schools.)
55 Broadview College-Milwaukee
190 Blackhawk Technical Institute-Janesville
104 Fox Valley Technical Institute-Oshkosh
177 Lakeshore Technical Institute-Cleveland
531 Waukesha Technical Institute-Waukesha
304 Milwaukee Area Technical College-Waukesha
215 Milwaukee Area Technical College-Oshkosh
277 Mid-State Technical College-Waukesha
288 Northland Technical College-Two Lakes
304 Horsham Technical College-Bloomington

152 Marketing-Fashion Merchandising (2-year associate degree)

DESCRIPTION OF PROGRAM:
Fashion merchandisers purchase clothing for retail in sufficient quantity and with sufficient appeal to sell rapidly and profitably. They assess merchandise quality, negotiate prices, set markups, price for resale, maintain stock, and help with advertising.

COURSES:
Courses may include marketing, design, advertising, salesmanship, fashion industries, business math, credit, clothing design and selection, and fashion styling, promotion, and merchandising.

SCHOOLS OFFERING PROGRAM:
(Excerpt program description, courses, and/or title may differ for these schools.)
55 Broadview College-Milwaukee
190 Blackhawk Technical Institute-Janesville
104 Fox Valley Technical Institute-Oshkosh
177 Lakeshore Technical Institute-Cleveland
531 Waukesha Technical Institute-Waukesha
304 Milwaukee Area Technical College-Waukesha
215 Milwaukee Area Technical College-Oshkosh
277 Mid-State Technical College-Waukesha
288 Northland Technical College-Two Lakes
304 Horsham Technical College-Bloomington

153 Marketing-Industrial (2-year associate degree)

DESCRIPTION OF PROGRAM:
Industrial marketing programs train individuals who specialize in transferring goods from manufacturers to wholesalers and distributors.

COURSES:
Courses may include marketing, economics, salesmanship, advertising, data processing, purchasing, and accounting.

SCHOOLS OFFERING PROGRAM:
(Excerpt program description, courses, and/or title may differ for these schools.)
55 Broadview College-Milwaukee
190 Blackhawk Technical Institute-Janesville
SCHOOLS-VOCATIONAL
302-304

580 RELIGIOUS AFFILIATION
584 No religious affiliation
660 ADMISSIONS INFORMATION
668 Special uses other than SAT or ACT required
661 DEADLINES FOR FRESHMEN ENTERING IN THE FALL
663 No deadline
677 ACCREDITATION
680 The Association of Independent Schools and Colleges
682 FINANCIAL AIDS
687 School offers Federal College Work Study Program
690 School offers the Pell Grant
699 School offers Supplemental Educational Opportunity Grant
720 Program LEADS TO:
723 Associate degree
580 RELIGIOUS AFFILIATION
584 No religious affiliation
585 RESIDENCE
588 Occupational
591 Majority of students commute
600 ADMISSIONS INFORMATION
603 No test required prior to admission
605 TOEFL (Test Of English As A Foreign Language) required for international students
607 Credit may be given for past secondary level work in high school
609 Freshman admitted either as a freshman or transfer student
611 DEADLINES FOR FRESHMEN ENTERING IN THE FALL
613 Application after August 1 of the entrance year
617 ACCREDITATION
619 Accredited by the North Central Association of Colleges and Secondary Schools
621 Accredited by the National League for Nursing & the State Board of Nursing
626 Accredited by the Committee on Allied Health Education & Accreditation (CAHEA)
635 FINANCIAL AIDS
636 Special aids available to enrolled in certain departments/programs
637 School offers Federal College Work Study Program
916 Region 6: Superior and Northwest Area

PROGRAMS OF STUDY
540 DISTRIBUTIVE EDUCATION
544 Fashion Retailing (1-yr. Diplom)
158 OFFICE EDUCATION
159 Accounting (2-yr. Associate Degree)
230 Administrative Assistant (2-yr. Associate Degree)
214 Computer Programming
446 CONTINUING EDUCATION FOR SKILL UPGRADE OR EMPLOYMENT
447 Business & Management
451 Electronic Technology

504 Normandale Community College
Bloomington

GENERAL INFORMATION
Normandale Community College
Two-year Community College

Location:
9700 Frances Ave, S Bloomington, MN 55431
612-930-9300

Unique School Strengths (Provided by the School):
Normandale Community College is a student-supported community college and the largest of Minnesota's 19 community colleges. It enrolls more than 6,600 students, both in day and evening programs. The school offers the first two years of college for students planning to complete a bachelor's degree. These students complete the liberal arts (associate degree) requirements and the pre-major requirements necessary to enter their junior year of college. In addition, Normandale offers a variety of one or two year career programs that are designed to provide practical training and job placement upon completion of the program. The A.A., A.A.S., and A.S. degree are granted.

Expected Tuition and Fees, 1986-87:
Full-time tuition is $1,102 per year
Cost is $33.30 per credit.

Further Information:
For further information, call or write the Admission Office.

INSTITUTIONAL CHARACTERISTICS
530 TYPE OF SCHOOL
531 Public
571 PROGRAM LEADS TO:
574 Associate degree
580 RELIGIOUS AFFILIATION
584 No religious affiliation
585 RESIDENCE
588 Occupational
591 Majority of students commute

611 DEADLINES FOR FRESHMEN ENTERING IN THE FALL
613 Application after August 1 of the entrance year
617 ACCREDITATION
619 Accredited by the North Central Association of Colleges and Secondary Schools
621 Accredited by the National League for Nursing & the State Board of Nursing
626 Accredited by the Committee on Allied Health Education & Accreditation (CAHEA)
635 FINANCIAL AIDS
636 Special aids available to enrolled in certain departments/programs
637 School offers Federal College Work Study Program

304 Normandale Community College
Bloomington

Programs of Study

This is an example of a description of a school in a neighboring state that offers program '105 Marketing.'
SCHOOLS-VOCATIONAL

304-306

611 Interdisciplinary or interdepartmental courses of study available
690 ASSESSMENT OF PRIOR LEARNING
692 Departmental exams
694 CLEP (College Level Exam Program)
695 ACE (guide to evaluation of educational experiences in military)
700 ER VICES AVAILABLE
701 Formal counseling service
702 Career assistance center for disadvantaged/handicapped
705 Study skills workshops
720 STUDENT AFFAIRS
730 Student share in decision-making of school policies/programs
732 Student government organization available
800 CALENDAR PLAN OF SCHOOL
832 Degree
833 Building question available
834 Student advising open schedule
845 CAMPUS ACTIVITIES
846 Band
847 Campus publications (newspapers, literary magazine, etc.)
848 Choir/choral
850 Choral groups
850 Cultural activities (concerts, plays, art exhibits, etc.) available on campus
852 Debating
853 Drama
855 Dramatic clubs
865 HANDICAPPED SERVICES AVAILABLE
866 Programs for hearing-impaired
867 Programs for deaf students
868 Programs for blind students
869 Programs for mobility-impaired students
870 No barriers to access to campus buildings for handicapped (in wheelchairs)
880 PLACEMENT SERVICE
881 Placement service offered
885 SPONSORSHIP
887 School not sponsored by union, association, or company
890 TOTAL ENROLLMENT OF SCHOOL

895 Total enrollment 5000-10,000
900 SIZE OF CITY IN WHICH SCHOOL IS LOCATED
902 In medium size city (20,000-35,000)
910 LOCATION OF SCHOOL
914 Region 6: La Crosse and Eau Claire Area
916 Region 6: Superior and Northwest Area

PROGRAMS OF STUDY
400 HEALTH OCCUPATIONS
470 Dental Assistant (1-yr. Diploma)
67 Dental Hygiene (2-yr. Assoc Degree)
74 Medical Assistant (1-yr. Diploma)
78 Nursing-Technical, R.N. (2-yr Assoc Degree)

100 HOME ECONOMICS & CONSUMER EDUCATION
111 Careers: Technical (2-yr. Assoc Degree)
140 DISTRIBUTIVE EDUCATION
146 Hospitality Management (2-yr. Assoc Degree)
147 Hotel/Motel Management (2-yr. Assoc Degree)
150 Marketing (2-yr. Assoc Degree)
157 Distributive Education, Other
214 Computer Programming
337 Police Science (2-yr. Assoc Degree)

ATHLETICS-INTRAMURAL
773 Badminton
774 Batball
775 Basketball
776 Bowling
780 Cross-Country Skiing
783 Field Hockey
783 Football
785 Handball
788 Ice Hockey
792 Paddle Tennis
793 Racquetball
800 Soccer
801 Softball
806 Table Tennis
807 Theatrical
809 Volleyball

ATHLETICS-INTER-SCHOOL
823 Baseball
824 Basketball
832 Football
833 Golf

306 Ray College of Design
Chicago

GENERAL INFORMATION
Ray College of Design
Private Two-year College

Location: 464 N Michigan Ave, Chicago, IL 60611
312-280-1300

Unique School Strengths (Provided by the S-32l)

Ski:' UPGRADING OR JOB E ENMENT
441 Accounting
442 Allied Health
447 Business & Management
448 Business & Office
449 Computer Technology
452 Counseling & Social Services
454 Education
458 Health
461 Labor & Industrial Relations
469 Real Estate
476 Visual & Performing Arts
475 Skills Upgrading or Job Enhancement, Other

ALTERNATIVE PROGRAMS
147 Hospitality Management (2-yr. Assoc Degree)
149 Hospitality Management (2-yr. Assoc Degree)
150 Marketing (2-yr. Assoc Degree)
157 Distributive Education, Other
214 Computer Programming
337 Police Science (2-yr. Assoc Degree)

ATL€THS-INTER-SCHOOL
823 Baseball
824 Basketball
832 Football
833 Golf

Degree of Associate Science in Interior Design, Communication Design (with majors in Illustration Design, Advertising, Photography, Advertising Design, or Fashion Illustration), and Fashion Merchandising (with a minor in Fashion Display). The Woodfield Campus in Schaumburg offers Associate Degree
PROGRAMS

615-630

1022 Purdue University-West Lafayette IN

616 American Indian Studies

DESCRIPTION OF PROGRAM:
American Indian studies programs explore the history, society, politics, culture, and economies of American Indians.

COURSES:
Courses may include general liberal arts courses, anthropology, American Indian languages and literature, economics, geography, history, music, political science, sociology, theater, and drama.

SCHOOLS OFFERING PROGRAM:
(Exact program description, courses, and/or title may differ for these schools.)
564 Northland College-Ashland
889 Augsburg College-Minneapolis MN
890 Benedict State University-Benedict MN
900 College of St Scholastica-Duluth MN
934 St. Olaf College-Northfield MN
944 University of Minnesota-Twin Cities

617 Hispanic-American Studies

DESCRIPTION OF PROGRAM:
Hispanic-American studies programs explore the history, society, politics, culture, and economies of Hispanic-Americans.

COURSES:
Courses may include general liberal arts courses, anthropology, Spanish, comparative literature, economics, geography, history, music, political science, sociology, theater, and drama.

SCHOOLS OFFERING PROGRAM:
(Exact program description, courses, and/or title may differ for these schools.)
564 University of Wisconsin-Madison
566 University of Wisconsin-Milwaukee
630 DePaul University-Chicago IL
870 University of Michigan-Ann Arbor MI
914 Hamline College-St Paul MN
944 University of Minnesota-Twin Cities
1022 Indiana University-Bloomington IN

618 Jewish Studies

DESCRIPTION OF PROGRAM:
Jewish studies programs explore the history, society, politics, culture, and economics of the Jewish people.

COURSES:
Courses may include general liberal arts courses, anthropology, Hebrew language and literature, economics, geography, history, music, political science, sociology, theater, and drama.

SCHOOLS OFFERING PROGRAM:
(Exact program description, courses, and/or title may differ for these schools.)
564 University of Wisconsin-Madison
566 University of Wisconsin-Milwaukee
630 DePaul University-Chicago IL
870 University of Michigan-Ann Arbor MI
914 Hamline College-St Paul MN
944 University of Minnesota-Twin Cities
1022 Indiana University-Bloomington IN

619 Ethnic and Area Studies, Other

DESCRIPTION OF PROGRAM:
The ethnic and area studies programs not discussed elsewhere are included here.

SCHOOLS OFFERING PROGRAM:
(Exact program description, courses, and/or title may differ for these schools.)
914 Macalester College-St Paul MN
944 St Olaf College-Northfield MN

630 Business and Management

DESCRIPTION OF PROGRAM:
Business and management programs prepare individuals for careers in planning, organizing, directing, and controlling business office systems and procedures.

SCHOOLS OFFERING PROGRAM:
(Exact program description, courses, and/or title may differ for these schools.)
9044 Alfred University-Seneca
508 Beloit College-Beloit
510 Cardinal Stritch College-Milwaukee
512 Carroll College-Waukesha
514 Carthage College-Koshkonong
516 Concordia College-Moorhead
518 Edgewood College-Madison
524 Lakehead College-Superior
130 Maran College-Paul de Luce
152 Marquette University-Milwaukee
156 Milwaukee School of Engineering-Milwaukee
540 Mount Mary College-Milwaukee
542 Mount St Mary College-Lagrange
544 New College & Technological Institute-Birmingham
546 Northland College-Ashland
548 Ripon College-Ripon
550 Saint Norbert College-De Pere
552 Silver Lake College-Minchwaukeo
554 Strasen College-Milwaukee
564 University of Wisconsin-Stout Chippewa
566 University of Wisconsin-Oshkosh
568 University of Wisconsin-Oshkosh
570 University of Wisconsin-Oshkosh
572 University of Wisconsin-Platteville
576 University of Wisconsin-Stevens Point
578 University of Wisconsin-Stout-Stout
580 University of Wisconsin-Superior Superior
582 University of Wisconsin-Waterport
584 UW Center-Baraboo
586 UW Center-Barron County-Barron Lake
588 UW Center-Fox Valley-Dells
590 UW Center-Fox Valley-Manasha
592 UW Center-Manitowoc
594 UW Center-Marathon
596 UW Center-Wisconsin Dells
598 UW Center-Marinette-Wood County
600 UW Center-Richland
602 UW Center-Rock County-Janesville
604 UW Center-Sherwood
606 UW Center-Shawano
608 UW Center-Waupaca
610 University of Wisconsin-La Crosse
614 Wisconsin Lutheran College-Milwaukee
636 Concordia College-River Forest IL
638 DePaul University-Chicago IL
654 Illinois Institute of Technology-Chicago IL
672 Lake Forest College-Lake Forest
676 Loyola University-Chicago
683 Mundelein College-Chicago
696 Northern Illinois University-DeKalb IL
704 Park College-St Louis
710 Rockford College-Rockford IL
722 University of Illinois-Champaign IL
736 Wheaton College-Wheaton IL

This college program of study was referenced from occupations 1240 and 1250A on the first page.

We'll see a description of Alverno College in a few pages.

Descriptions of these colleges are in the Education Handbook under "schools-colleges".
This college program of study was referenced from Occupation 1240 - Purchasing Managers.

631 Business & Management, General

DESCRIPTION OF PROGRAM: Business and general management programs study the processes of purchasing, selling, and producing goods, commodities, and services as well as principles of good organization which help in managing a profit.

COURSES: Course work may include accounting, finance, marketing, economics, management, and business organizations.

SCHOOLS OFFERING PROGRAM: (Exact program description, course, and/or title may differ at these schools.)

632 Accounting

DESCRIPTION OF PROGRAM: Accounting programs study the principles, procedures, and theory of organizing, maintaining, and auditing business activities.

COURSES: Accounting majors take courses in finance and accounting, economics, and management. Graduates may wish to go on to take the Certified Public Accountant's examination.

SCHOOLS OFFERING PROGRAM: (Exact program description, course, and/or title may differ at these schools.)
SCHOOLS-COLLEGE

504 Alverno College
Milwaukee

GENERAL INFORMATION
Alverno College
Private college
State: Wisconsin
Location:
340 S. 29th Street
Milwaukee, WI 53215
414-267-3000

Summary Information
Tuition and Fees:
In-state: $4,666
Out-of-state: $8,668
Room and Board: $2,000
Fall Application Deadline: 8/1
Test Required for Admission: ACT, TOEFL
Approx. Minimum Scores of Entering Freshmen
ACT Composite: 18
Percentage of Freshmen from Top Fifty of High School Class: 7

Unique School Strengths (Provided by the School)
Alverno College is a private, coeducational college of liberal arts and sciences with a strong commitment to the development of the whole person. The college offers a variety of programs designed to meet the needs of students from different backgrounds and interests. The college emphasizes the integration of theory and practice in all areas of study, and provides opportunities for students to develop critical thinking skills and become effective communicators. The college also supports diversity and inclusion, and works to create a welcoming and inclusive community for all students.

Further Information:
For further information, write to: Admissions Office, Alverno College, 340 S. 29th Street, Milwaukee, WI 53215.

INSTITUTIONAL CHARACTERISTICS
101 LOCATION OF SCHOOL
15 Region: II, Midwestern and Southeastern
Area: 70
10 SIZE OF CITY OR TOWN IN WHICH COLLEGE IS LOCATED
72 Milwaukee, a large city (over 500,000)
80 UNDERGRADUATE ENROLLMENT
153 Freshmen: 1,003, 1,499
91 Total: 1,499
95 CONTROL
97 Private: control
100 RELIGIOUS AFFILIATION
101 No religious affiliation
110 ADMISSION INFORMATION
Preference in admission:
114 ACT is required
115 Test of English as a foreign language (TOEFL) required for international students.
116 Qualified students admitted after completion of junior year of high school (early admissions)
119 Credit may be granted for college-level work completed in high school.
120 Transfer credit granted for previous college work.
122 Freshmen admitted other than in the fall.
123 Transfer students admitted.
124 Transfer students admitted other than in the fall.
125 Early decision plan available.
126 Admission decisions made on a rolling basis.
130 College seeks geographically diverse student body.
131 College seeks intellectually diverse student body.
134 APPLICATION DEADLINE (For freshman admission):
141 May 1
145 Semester: Fall
160 ACCEPTED, 2/1
161 Accepted by one of the COPA regional organizations.
170 TYPE OF INSTITUTION
171 Liberal arts college
173 College also offers associate degrees
180 RELIABILITY POLICIES
205 Reader's references for women applicants available.
206 Readers' references allowed into on-campus interviews.
207 FINANCIAL AID
208 Offers Federal Work-Study Program.
209 Offers Pell Grants.
213 Offers Supplemental Educational Opportunity Grants Program.
214 Offers Federal Guaranteed Loan Program.
215 Offers Federal National Direct Student Loan Program.
216 Offers PLUS Loan Program.
310 Scholarship funds available.
311 No athletic scholarships available for men and women.
314 Other financial aid available.
320 ACADEMIC CHARACTERISTICS
321 Academic character of the student body:
344 Median ACT Composite: 21
350 FRESHMEN ATTENTION
351 Freshman attrition rate: 5%
352 Freshmen admitted: 1,037
353 Freshmen admitted other than in the fall: 22
354 ACT Composite: 18
355 FACULTY
356 More than 75% of the faculty hold the doctorate degree.
357 More than 75% of the faculty hold masters or doctorate degree.
360 SPECIAL PROGRAMS AND OPTIONS FOR STUDY
361 Pre-medical program
362 Pre-dental program
363 Pre-law program
365 Independent study courses available.
366 Interdisciplinary or interdepartmental courses of study.
368 Pass/Fail grade option.
370 Remedial or developmental programs
379 Off-campus study
381 Internships
384 Career counseling services
386 Foreign language advisors
388 Services for mobility-impaired students.
399 Assignment plan available for students with disabilities.
400 Assignment plan available for physically disabled students.
401 Assignment plan available for emotionally disabled students.
402 Assignment plan available for learning-disabled students.
403 Assignment plan available for deaf-disabled/mentally disabled students.
404 Assignment plan available for Native American students.
410 ASSESSMENT OF PRIOR LEARNING
412 Departmental exams
414 CLEP (College Level Exam Program)
425 CAMPUS LIFE
426 Campus housing available.
427 Campus activities available on campus.
428 Cultural activities available on campus.
435 RELIGIOUS SERVICES
436 Religious services available on or near campus.
437 Roman Catholic services available on or near campus.
438 Jewish services available on or near campus.
440 CAMPUS ACTIVITIES

504 Alverno College
Milwaukee

GENERAL INFORMATION
Alverno College
Private college
State: Wisconsin
Location:
340 S. 29th Street
Milwaukee, WI 53215
414-267-3000

Summary Information
Tuition and Fees:
In-state: $4,666
Out-of-state: $8,668
Room and Board: $2,000
Fall Application Deadline: 8/1
Test Required for Admission: ACT, TOEFL
Approx. Minimum Scores of Entering Freshmen
ACT Composite: 18
Percentage of Freshmen from Top Fifty of High School Class: 7

Unique School Strengths (Provided by the School)
Alverno College is a private, coeducational college of liberal arts and sciences with a strong commitment to the development of the whole person. The college offers a variety of programs designed to meet the needs of students from different backgrounds and interests. The college emphasizes the integration of theory and practice in all areas of study, and provides opportunities for students to develop critical thinking skills and become effective communicators. The college also supports diversity and inclusion, and works to create a welcoming and inclusive community for all students.

Further Information:
For further information, write to: Admissions Office, Alverno College, 340 S. 29th Street, Milwaukee, WI 53215.

INSTITUTIONAL CHARACTERISTICS
101 LOCATION OF SCHOOL
15 Region: II, Midwestern and Southeastern
Area: 70
10 SIZE OF CITY OR TOWN IN WHICH COLLEGE IS LOCATED
72 Milwaukee, a large city (over 500,000)
80 UNDERGRADUATE ENROLLMENT
153 Freshmen: 1,003, 1,499
91 Total: 1,499
95 CONTROL
97 Private: control
100 RELIGIOUS AFFILIATION
101 No religious affiliation
110 ADMISSION INFORMATION
Preference in admission:
114 ACT is required
115 Test of English as a foreign language (TOEFL) required for international students.
116 Qualified students admitted after completion of junior year of high school (early admissions)
119 Credit may be granted for college-level work completed in high school.
120 Transfer credit granted for previous college work.
122 Freshmen admitted other than in the fall.
123 Transfer students admitted.
124 Transfer students admitted other than in the fall.
125 Early decision plan available.
126 Admission decisions made on a rolling basis.
130 College seeks geographically diverse student body.
131 College seeks intellectually diverse student body.
134 APPLICATION DEADLINE (For freshman admission):
141 May 1
145 Semester: Fall
160 ACCEPTED, 2/1
161 Accepted by one of the COPA regional organizations.
170 TYPE OF INSTITUTION
171 Liberal arts college
173 College also offers associate degrees
180 RELIABILITY POLICIES
205 Reader's references for women applicants available.
206 Readers' references allowed into on-campus interviews.
207 FINANCIAL AID
208 Offers Federal Work-Study Program.
209 Offers Pell Grants.
213 Offers Supplemental Educational Opportunity Grants Program.
214 Offers Federal Guaranteed Loan Program.
215 Offers Federal National Direct Student Loan Program.
216 Offers PLUS Loan Program.
310 Scholarship funds available.
311 No athletic scholarships available for men and women.
314 Other financial aid available.
320 ACADEMIC CHARACTERISTICS
321 Academic character of the student body:
344 Median ACT Composite: 21
350 FRESHMEN ATTENTION
351 Freshman attrition rate: 5%
352 Freshmen admitted: 1,037
353 Freshmen admitted other than in the fall: 22
354 ACT Composite: 18
355 FACULTY
356 More than 75% of the faculty hold the doctorate degree.
357 More than 75% of the faculty hold masters or doctorate degree.
360 SPECIAL PROGRAMS AND OPTIONS FOR STUDY
361 Pre-medical program
362 Pre-dental program
363 Pre-law program
365 Independent study courses available.
366 Interdisciplinary or interdepartmental courses of study.
368 Pass/Fail grade option.
370 Remedial or developmental programs
379 Off-campus study
381 Internships
384 Career counseling services
386 Foreign language advisors
388 Services for mobility-impaired students.
399 Assignment plan available for students with disabilities.
400 Assignment plan available for physically disabled students.
401 Assignment plan available for emotionally disabled students.
402 Assignment plan available for learning-disabled students.
403 Assignment plan available for deaf-disabled/mentally disabled students.
404 Assignment plan available for Native American students.
410 ASSESSMENT OF PRIOR LEARNING
412 Departmental exams
414 CLEP (College Level Exam Program)
425 CAMPUS LIFE
426 Campus housing available.
427 Campus activities available on campus.
428 Cultural activities available on campus.
435 RELIGIOUS SERVICES
436 Religious services available on or near campus.
437 Roman Catholic services available on or near campus.
438 Jewish services available on or near campus.
440 CAMPUS ACTIVITIES

504 Alverno College
Milwaukee
SCHOOLS-COLLEGE
504-506

442 Campus publications (newspaper, literary magazine)
444 Choral groups
446 Drama
447 Modern dance
449 Orchestra
451 Political organizations
453 Social service organizations
456 Student government
459 Other campus activities available
120 NATIONAL CHARACTERISTICS
1220 ENROLLMENT
1231 Under 1,000
1270 AREA/COMMUNITY SIZE
1274 Outside urban city of large metropolitan area
1280 AFFILIATION/CONTROL
1292 Private control, not religious
1290 LEVEL OF DEGREE OFFERED
1291 Bachelor's degree only
1295 COMPETITIVENESS OF SCHOOL
1299 Lower competition, open admissions
1300 PERCENTAGE OF FRESHMEN GRADUATING
1302 50-64.9% graduations
1305 PERCENT OF STUDENTS ATTENDING GRADUATE SCHOOL
1308 11-25% go into graduate studies
1310 REGULATIONS OF THE SCHOOL
1311 Classroom attendance may be required
1320 PERCENTAGE LIVING ON CAMPUS
1332 Under 25% live on campus
1335 PERCENT FROM OUT OF STATE
1338 Under 25% from out-of-state
1340 PERCENT OF STUDENTS WORKING WHILE IN SCHOOL
1343 25-75% work

PROGRAMS OF STUDY
410 BUSINESS AND MANAGEMENT
411 Business and Management, General
700 COMMUNICATIONS
701 Communications, General
702 Communications Technology
707 Public Relations
709 Communications, Other
720 COMPUTER AND INFORMATION SCIENCES
721 Computer and Information Sciences, General
730 EDUCATION
742 Elementary Education
744 Secondary Education
745 Adult and Continuing Education
746 Pre-School or Kindergarten Education
760 CERTIFICATION, SPECIFIC SUBJECT AREAS
762 Art Education
763 Business Education
775 Music Education
7753 Aeronautical Science
790 ENGINEERING
801 Electrical, Electronic, and Communications Engineering
809 Mechanical Engineering
860 ALLIED HEALTH
881 Art Therapy
891 Music Therapy
872 Nuclear Medicine Technology
880 HEALTH SCIENCES
882 Medical Laboratory Technology
894 Nursing, General
899 Pre-Dentistry
900 Pre-Medicine
901 Pre-Veterinary
902 LAW
921 Pre-Law
920 ELECTRICAL (HUMANITIES)
931 Letters and Humanities, General
935 English, General
960 LIFE SCIENCES
961 Biology, General
969 MATHEMATICS
991 Mathematics, General
1010 MULTI-DISCIPLINARY STUDIES
1011 Psychological Science
1012 Biological and Physical Sciences
1013 Humanities and Social Sciences
1014 Liberal Studies
1020 PHILOSOPHY AND RELIGION
1031 Philosophy
1032 Religion
1040 THEOLOGY
1062 Religious Education
1063 Theological Music
1080 PHYSICAL SCIENCES
1091 Physical Science, General
1095 Chemistry, General
1100 PSYCHOLOGY
1101 Psychology, General
1130 SOCIAL SCIENCES
1131 History
1142 Sociology
1150 VISUAL AND PERFORMING ARTS
1151 Visual and Performing Arts, General
1162 Fine Arts, General
1164 Drawing
1165 Music, General
1168 Music Performance
1170 Music Theory and Composition
1190 CONTINUING EDUCATION FOR SKILL UPGRADE OR JOB ENHANCEMENT
1197 Business & Management
1199 Computer Technology
1204 Education
1208 Health
1314 Personnel Services
1320 Recreation Services
1353 Visual & Performing Arts
1354 ESLU Upgrading or Job Enhancement, Other

ALTERNATIVE PROGRAMS
431 Business and Management, General
436 Business and Management, General
721 Computer and Information Sciences, General
894 Nursing, General

ATHLETICS-INTRAMURAL
473 Cross-Country skiing
475 Golf
476 Softball
503 Volleyball

506 Bellin College of Nursing
Green Bay

GENERAL INFORMATION
Bellin College of Nursing
Private College

State:
Wisconsin

Location:
925 CBS Street
Green Bay, WI 54301
414-433-3560

Summary Information
Tuition and Fees
In-state: $3,000
Out-of-state: $3,600
Fall Application Deadline: 1/15
Tens Required for Admission: ACT

Approximate Median Score of Entering Freshmen
ACT Composite: 22

Unique School Strengths (Provided by the School)
Bellin College of Nursing provides a unique program of study leading to a Bachelor of Science in Nursing. The

67 71
This is a sample of a college offering a specialized program. It has a different format because we receive these descriptions from Orchard House, Inc.

NATIONAL COLLEGE

Philadelphia College of the Performing Arts

1322

173 Men

310 Women

Total enrollment includes grad and part-time: 529

SAT: FAF 8665

FINANCIAL

Expenses

Tuition (1985-86): $6,500 per year
Room $2,100
No meal plan
Required fees total $30
Books and personal expenses (school's estimate)
$300 to $500

Financial Aid

College participates in College Board College Scholarship Services, ACT Financial Aid Services, and uses PHEAA Aid.

Scholarships and grants

Range from $200 to $3,800 per year

Scholarship grants totaling $350,000 granted (1984-85)

For FAF-PTS by March 1. College and application deadline is on rolling basis. Nonrecognition of awards and rolling basis.

Pell Grants, SEOG, college and private scholarships, state, college, and private grants

Loans

Range from $600 to $2,500 per year

Loans granted to 94% of undergraduates and applicants (1984-85)

Application deadline on rolling basis:

NDSL, PLUS, GSL, state loans, Tuition Plan Inc.

Academic Management Services

ACADEMIC

Accredited by NASM and nationally by National Association of Schools of Music

Faculty

Instructional Staff: 38 full-time, 39 part-time

Doctors: 30% Honors 70%

Bachelors: 5% Other 95%

Grad student-faculty ratio: 8 to 1.

Curriculum

Degrees offered: B Mus., B Mus. Ed., B F A, B F M in Dance

Majors offered:

Acting

Dance

Music Education

Musical Theater

Theater (Performance)

Voice/Opera

General education requirements. Dual degree possible, independent study. Pass/fail grading system implemented.

Undergraduate and elementary education certification undergraduates may not take graduate courses. Computer center. Library of 18,000 volumes and 135 periodical subscriptions.

Academic Experience: 80% of freshmen drop out for academic reasons.

© 1985 Orchard House, Inc - Concord, MA 01742

Philadelphia, Pennsylvania 19102
Telephone 215 895 5100
Director of Admissions: Edward T. Blake, M.B.
Telephone 215 895 5174
Private college established 1870 as a coed institution.

49% of students from out of state, 0% from out of country.

ADMISSIONS

Requirements

Graduation from secondary school required

ACT 101 for students not normally admissible

SAT or ACT required:

Campus visit and interview recommended. Off-campus interview held.

Entrance audition required of all applicants.

Admissions may be deferred.

Application fee: $25, non-refundable.

Basis for Candidate Selection

Academic:

Secondary school record

ACT or SAT scores

Class rank

School's recommendation

Other:

Particular talent or ability is emphasized

Character and personality are important

Extracurricular participation and geographical distribution are considered.

Admission Procedure

Normal sequence:

Take SAT or ACT by December 1 of 12th year.

Suggest filing application by March 1 of 12th year. No deadline.

Notification of admission on rolling basis.

Candidate must accept offer and pay $100 tuition deposit and $100 room deposit, both non-refundable, by May 1.

College has Early Decision Program:

Take SAT by October 1 of 12th year. Apply by December 1. Applicant may apply to other colleges.

College has Early Entrance and Concurrent Enrollment:

College does not participate in College Board Advanced Placement Program. College grants placement on basis of exams in theory, music history, piano, and English.

Transfer students admitted to both semesters: 20% of all new students were transfers into all classes in fall 1984.

Experiences:

Composition of student body (1984-85):

Asian 1%

Black 20%

Hispanic 5%

Native American 1%

White 75%

Average age of undergraduates is 20

68
[CAREER RESOURCES] These are books and A-V materials that can be used in curriculum planning.

170 JOBS AND EMPLOYMENT OPPORTUNITIES

PUBLISHER/DISTRIBUTOR: Cambridge Book Company
Adult Education Department
567 Seventh Avenue
New York, NY 10006

RESOURCE DESCRIPTION:
This series includes 8 15-minute color video programs and 30 black-and-white photo tests about job skills in the world of work. Some of the issues covered are: good and bad job habits; how to get unemployment insurance; how to act in a job interview; obtaining job training; legal remedies for discrimination; how problems at work affect the family; and matching skills to jobs.

ORDERING INFORMATION:
The series price is $1,070.00, number JAC223.

171 CAREER EXPLORATION SERIES

PUBLISHER/DISTRIBUTOR: Career Ads, Inc.
950 Lurline Ave., Dept. V14
Chatsworth, CA 91311

RESOURCE DESCRIPTION:
This series is designed for high school guidance counselors, students at remedial levels, or those preparing for vocations requiring little or no special training or education. Each segment consists of two 30-minute segments, one gives an overview of the general field and the other focuses on specific jobs within the field. These are computer-generated 35-mm slides and include a commentary/annotated script.

ORDERING INFORMATION:
The complete kit of 22 clusters includes a comprehensive guidebook and other helpful materials for $1,720.00 (number AX-CE3) Additional and the price of separate clusters is available.

172 PACEMAKER VOCATIONAL READERS

PUBLISHER/DISTRIBUTOR: Career Ads, Inc.
950 Lurline Ave., Dept. V14
Chatsworth, CA 91311

RESOURCE DESCRIPTION:
These are career-oriented books for students with severe reading disabilities. Career opportunities in 64 occupations requiring little or no reading skill, and which special needs students have demonstrated they can succeed in, are presented. Each reader contains a high interest level (grades 7-12) and a reading level below grade 3 with photographs used liberally. Tape cassettes are available which contain word-for-word transcriptions of the fictional stories about each occupation. Students can follow the text on each of the 64-page books, developing both reading and comprehension.

ORDERING INFORMATION:
The set of ten readers is $109.30, number FE 72627. The set of reader cassettes is $42.00, number FE 72636

173 CAREERS WITHOUT COLLEGE

PUBLISHER/DISTRIBUTOR: Career Ads, Inc.
950 Lurline Ave., Dept. V14
Chatsworth, CA 91311

RESOURCE DESCRIPTION:
This program highlights eight rewarding occupational fields which do not require a college degree. Each segment consists of two 30-minute segments. The first describes the job, its duties, responsibilities, and rewards; and the second presents details about the necessary skills, and training required for that particular position. The careers covered are paramedic (CX100), broadcast technician (CX300), secretary (CX301), computer programmer (CX303), bookkeeper (CX304), dental hygienist (CX305), automotive mechanic (CX306), and paraprofessional teacher (CX307).

ORDERING INFORMATION:
The complete kit of 8 clusters includes a comprehensive guidebook and other helpful materials for $1,730.00 (number AX-CE9). Additional and the price of separate clusters is available.

174 RESOURCES FOR CAREER DEVELOPMENT: AN ANNOTATED BIBLIOGRAPHY

PUBLISHER/DISTRIBUTOR: Indiana Career Resource Center
1201 S. Greenlawn Ave.
South Bend, IND 46615 (1979)

RESOURCE DESCRIPTION:
This document presents approximately 450 annotated and cross-indexed listings. Included in this publication are a guide to use of the bibliography, Career-A-D-Aides charts, annotated references to primary materials, textbooks, simulations, films and cassette media, and test instruments. A partial listing of publishers and sources of career development materials is also included.

ORDERING INFORMATION:
The set of ten readers is $109.30, number FE 72627. The set of reader cassettes is $42.00, number FE 72636

176 I CAN BE ANYTHING

AUTHOR: Joyce S. Mitchell

PUBLISHER/DISTRIBUTOR: The College Board
881 Seventh Ave.
New York, NY 10019 (1976)

RESOURCE DESCRIPTION:
This book describes more than 100 careers for young women and introduces the crucial considerations of a life-style for girls and women. Seven related questions analyze each career. They are: what the work is like; what education is needed; how many women are now in the field; what the salaries are like; future prospects for women; what the work is like; and where to obtain further information. Many photos of female workers illustrate the entire book.
Philadelphia College of the Performing Arts (PA)

Guidance Facilities/Student Services
Academic Counseling: Tutoring, remedial learning services.
Health Services: Minority, handicapped, and veteran students.
Counseling: Birth control, abortion counseling, personal and psychological counseling, career counseling, placement services.
Physical Education: No requirements.
Religious and Convocation Requirements: None.

EXTRACURRICULAR ACTIVITIES

Athletics: No intercollegiate or intramural competition.
Other Student Activities: No social functions or services.
Student government: Diner, movie, and theme groups and activities.

REGULATORY

Manning: Freshmen are required to live on campus.
Cord dormitories: 25% of students live on campus.

Automobiles: All students may have cars on campus.

Other: Alcohol not allowed.
Class attendance required.

GENERAL

Environment: Urban campus in Philadelphia (population: 2,000,000). City served by air, bus, rail.

Calendar: Semester system; classes begin September 8, 1985.
Freshman orientation in September.
Wisconsin Developmental Guidance Model

The following is a condensed review of the Wisconsin Developmental Guidance Model. It shows the primary relationship between the Model and the use of Labor Market Information and related resources available through WCIS and other sources identified in this handbook. A complete Developmental Guidance Model publication is available from the Department of Public Instruction. For purposes of linking the Developmental Guidance Competency to labor market information, we have only presented the career/vocational portions of the model.

Developmental guidance, as a comprehensive K–12 program, is based on the belief that all children in all schools should participate in activities and instruction that will assist their optimal personal/social, career/vocational, and learning development. Developmental guidance differs from school guidance as we know it today in that it is a specific, preventive program. It has definite goals and objectives that use the counselor’s skills and training in the classroom as an additional delivery point. It also involves the entire school staff to reach all children, in addition to those in difficulty or crisis.

Developmental guidance is based on the concept that, as all children mature, they pass through identifiable developmental stages that are vital to their growth as individuals. These stages can be anticipated. Thus, guidance activities can facilitate healthy development of these needs before they become problems. In this manner, children will be equipped to successfully deal with the process of personal/social development, career/vocational development, and learning development as they mature.

This systematic approach, called Wisconsin Developmental Guidance Model (WDGM) is based on the work of Havighurst, Maslow, Erickson, Piaget, and others. It recognizes that all pupils pass through specific developmental stages as they mature. What happens or fails to happen to children/adolescents developmentally will determine life-long attitudes toward learning; assist or deter the acquisition of skills, the attainment of career goals, and the evolution of satisfactory attitudes toward self, society, family, and career. Knowing this, school guidance programs in Wisconsin must anticipate the personal/social, career/vocational, and learning needs of pupils. These must be addressed at each grade level and be structured to ensure that these needs are met. Such an approach stresses the prevention of problems by providing students with age-appropriate skills and information through instruction, group interaction, and individual counseling. All should be coordinated through the guidance program.

Guidance as an articulated program is the major responsibility of school counselors trained to meet the developmental needs of the maturing child. That training enables school counselors to have the knowledge and skills necessary to provide the unique service of counseling and to facilitate the systematic delivery of a planned program that will assist all pupils in their development regardless of race, sex, exceptional educational needs, economic status, or size and location of school.
How the WDGM Works

Major Developmental Areas. The WDGM focuses on three major areas of student development: Learning, Personal/Social, and Career/Vocational. These are the types of functional life competencies each person must attain in order to learn, achieve academic success, and prepare for a satisfying and productive career (see graphic at left).

Developmental Student Competencies. Specific student competencies are listed under each major developmental area. The competencies represent basic skills each person should master in order to deal effectively with daily life situations. The competencies are listed across age and grade levels and are consistent with children's general physical and intellectual capabilities at various stages.

Delivery System. The WDGM incorporates counselors, parents, school staff, community members, and business/industry/labor representatives into a guidance program delivery system. The WDGM suggests that the school district guidance program manager organize district resources to address the greatest number of student needs. Guidance program organization and management strategies will be elaborated upon throughout the WDGM.

Resource Organization and Management. Research and experience suggest that developmental guidance is more functional or less functional as levels of resource organization and management rise or fall. Programs in which the counselor is the sole resource provider may be limited. Guidance programs which involve a variety of school staff as well as community/business/labor/industry members are able to more efficiently help students attain skills and competencies. The key to a successful program is organization and management of guidance providers best suited to assist students in achieving life skills and competencies. It is important to note that the levels of resource organization and management described in the WDGM are cumulative.
**K-12 Developmental Competencies**

Developmental guidance is based on the premise that, as all children mature, they pass through various developmental stages vital to their growth. During these stages, specific kinds of learning and development must occur to ensure optimal progress.

The WDGM provides a developmentally based delivery structure that spans the K-12 years and matches student competencies that must be mastered with the delivery systems most appropriate for age- or grade-level groups. Elementary school children respond well to situations in which they Learn About and become aware of new things and ideas. They also need opportunities to explore what they are learning and to try out new things. Middle/junior high school-aged children are ready for Understanding and experimentation as they continue to absorb new facts and ideas. High school students need to Apply what they have previously learned and to constantly move toward increased understanding and additional knowledge.

**Developmental Student Competencies**

- **Elementary School**
  - Understanding
  - Applying

- **Middle/Junior High School**
  - Learning About
  - Applying

- **High School**
  - Learning About
  - Understanding

**K-12 Learning Competencies**

**K-12 Personal and Social Competencies**

**K-12 Career and Vocational Competencies**
Elementary School Student Competencies

Learning
- Understand the school environment and what is expected of students.
- Understand strengths, abilities, and how to learn most effectively.
- Understand relationships among ability, effort, and the quality of school achievement.
- Understand how to assess learning needs and where and when to seek help.
- Understand the process of setting meaningful school achievement goals.

Personal/Social
- Exhibit conflict-resolution skills with adults and peers.
- Exhibit respect for individual freedoms and rights of self and others.
- Understand the consequences of actions for self and others.
- Understand the influence that physical, emotional, and intellectual behaviors have on one another.
- Be aware of own emotional, physical, and intellectual development.
- Learn to communicate with peers and adults in various home, school, and community settings.
- Exhibit positive attitudes toward school, family, and self.
- Understand the concept of ongoing change in school, home, and community lives.
- Understand and respect differences among people’s cultures, lifestyles, attitudes, and abilities.

Career/Vocational
- Acquire knowledge about different occupations and changing male/female roles.
- Become aware of personal interests and preferences.
- Learn how to cooperate and coexist with others in work and play.
- Understand what it means to work and how school work relates to future plans.
- Become aware of worlds beyond the immediate experience.
Elementary School Career/Vocational Competencies

*Sample activities are illustrative only. Each district can use local resources, materials, and ideas.*

### Levels of Resource Organization and Management

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Counselors</th>
<th>Counselors + School Staff</th>
<th>Counselors + School Staff + Parents + Community + Business/Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Acquire knowledge about different occupations and changing male/female roles.</td>
<td>Provide occupational information to be used by all teachers as a classroom resource.</td>
<td>Coordinate efforts to have a variety of people speak to classes about their nontraditional occupations.</td>
<td>Provide mentorships for students who are interested in specific occupations.</td>
</tr>
<tr>
<td>- Become aware of personal interests and preferences.</td>
<td>Work with students who have unusual vocational or avocational interests and discuss how they may pursue them.</td>
<td>Do group work to enable students to become comfortable with their vocational interests and lifestyle preferences.</td>
<td>Coordinate community efforts that allow students to pursue their vocational interests outside of school.</td>
</tr>
<tr>
<td>- Learn how to cooperate and coexist with others in work and play.</td>
<td>Provide individual counseling to help students solve specific relationship conflicts.</td>
<td>Form a counselor and teacher team for activities that will encourage cooperation.</td>
<td>Carry out staff development to promote cooperation and not competition as a school philosophy.</td>
</tr>
<tr>
<td>- Understand what it means to work and how school work relates to future plans.</td>
<td>Team teach a unit on careers and the world of work.</td>
<td>Develop career awareness curriculum or philosophy that provides for ongoing career education in the classroom.</td>
<td>Coordinate relationships among labor and industry and school concerning curriculum that realistically meets the needs of the individual and society.</td>
</tr>
<tr>
<td>- Become aware of worlds beyond the immediate experience.</td>
<td>Work with individual students to develop self-awareness.</td>
<td>Teach activities to enhance awareness of self in relation to the rest of the world.</td>
<td>Provide staff inservice to illustrate the need to be aware of self in order to relate well with others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level I</th>
<th>Level II</th>
<th>Level III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

75 79
Middle/Junior High School Student Competencies

Learning
- Develop internal academic motivation.
- Develop good study skills.
- Develop a sense of the future and how to move toward it.
- Understand strengths and abilities and how to learn most effectively.
- Exhibit problem-solving skills.

Personal/Social
- Understand physical, emotional, and intellectual growth and development.
- Develop self and social self-concept.
- Understand and develop peer relationships.
- Exhibit positive attitudes toward school, family, and self.
- Learn to communicate with parents.
- Learn to cope with life's pressures, challenges, defeats, and successes.
- Learn to deal with ongoing changes in personal and academic life.

Career/Vocational
- Understand decision-making skills.
- Learn to cope with transition in school, home, and community lives.
- Become informed about alternative educational and vocational choices and preparation for them.
- Relate personal interests to broad occupational areas.
- Understand and use communication skills.
- Learn human conflict management with adults and peers.
- Learn that sex-role stereotyping, bias, and discrimination limit choices, opportunity, and achievement.
Middle/Junior High School Career/Vocational Competencies

Sample activities are illustrative only. Each district can use local resources, materials, and ideas.

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Counselors</th>
<th>Counselors + School Staff</th>
<th>Counselors + School Staff + Parents + Community + Business/Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand decision-making skills.</td>
<td>Work with students who exhibit an inability to make decisions.</td>
<td>Carry out decision-making and problem-solving activities for groups and classes.</td>
<td>Provide staff development on how decision making can be incorporated into all curricular areas.</td>
</tr>
<tr>
<td>Learn to cope with transition in school, home, and community lives.</td>
<td>Hold orientations to familiarize students with the expectations of the new environment. Counsel students having difficulty adjusting to new environments.</td>
<td>Have classroom discussions on expectations in new environments and how to respond appropriately.</td>
<td>Work with teachers, parents, and others to assist students in transition periods.</td>
</tr>
<tr>
<td>Become informed about alternative educational and vocational choices and preparation for them.</td>
<td>Provide occupational and educational information to all teachers. Ensure that students understand the impact of course choices.</td>
<td>Coordinate efforts to have guest speakers on various occupational areas.</td>
<td>Coordinate community resources to make all students more fully aware of vocational choices and the education required for them.</td>
</tr>
<tr>
<td>Relate personal interests to broad occupational areas.</td>
<td>Administer interest inventories to students to acquaint them with their interests.</td>
<td>Provide discussions for students on how interests are related to occupational choices.</td>
<td>Carry out staff development activities on interests, occupational choices, and career development.</td>
</tr>
<tr>
<td>Understand and use communication skills.</td>
<td>Work with students having difficulty communicating with peers or adults.</td>
<td>Teach communication skills. Provide interpersonal communication workshops.</td>
<td>Provide staff development on requiring good communication skills in all subject-area classes.</td>
</tr>
<tr>
<td>Learn human conflict management with adults and peers.</td>
<td>Work with students who are unable to resolve conflicts in an acceptable manner.</td>
<td>Do group work with students to better understand differences in individual responses to conflict.</td>
<td>Do staff development on positive conflict resolution methods.</td>
</tr>
<tr>
<td>Learn that sex role stereotyping, bias, and discrimination limit choices, opportunities, and achievement.</td>
<td>Counsel with students who are having difficulty making choices.</td>
<td>Inform students and parents about the career opportunities open to both sexes.</td>
<td>Promote a career day featuring parents and community members who work in traditional and nontraditional careers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level I</th>
<th>Level II</th>
<th>Level III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
High School Student Competencies

Learning
- Understand one's own learning abilities and how best to apply them.
- Become informed about self through assessment techniques.
- Learn to set realistic goals and develop strategies to reach them.
- Understand the school curriculum and the impact course selection will have on future plans.
- Understand the school environment and what is expected.

Personal/Social
- Understand physical, emotional, and intellectual growth and development.
- Learn to cope with change and plan for the future.
- Learn human-conflict resolution skills with adults and peers.
- Understand and appreciate one's own capabilities and those of others.
- Understand personal relationships and how to establish an independent identity.
- Take responsibility for personal decisions.

Career/Vocational
- Understand and develop decision-making skills.
- Understand the world of work and its expectations for employment.
- Become informed about educational/work alternatives.
- Understand continuous changes of male/female roles and how this relates to career choice.
- Develop the interpersonal skills necessary for harmony in the workplace.
- Become informed about up-to-date employment opportunities during and after high school.
- Form tentative career goals and strategies to reach them.
- Understand lifestyle preferences and relate them to occupational interests.
<table>
<thead>
<tr>
<th>Competencies</th>
<th>Counselors</th>
<th>Counselors + School Staff</th>
<th>Counselors + School Staff + Parents + Community + Business/Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand and develop decision-making skills.</td>
<td>Counsel individual students experiencing difficulty making decisions.</td>
<td>Team teach unit on decision making and career choice.</td>
<td>Assist staff in incorporating decision-making skills into their curriculums.</td>
</tr>
<tr>
<td>Understand the world of work and its expectations for employment.</td>
<td>Provide materials on occupations and postsecondary institutions.</td>
<td>Team with business/industry experts to teach units on employment expectations.</td>
<td>Assist staff to incorporate world-of-work expectations such as punctuality, responsibility, and accountability into the classroom.</td>
</tr>
<tr>
<td>Become informed about educational/work alternatives.</td>
<td>Work with individual students on postsecondary educational and work alternatives.</td>
<td>Hold group discussions of educational and work alternatives after high school.</td>
<td>Provide staff development on postsecondary educational and work alternatives. Encourage parent involvement as students explore educational and work alternatives.</td>
</tr>
<tr>
<td>Understand continuous changes of male/female roles and how this relates to career choice.</td>
<td>Work with individual students experiencing difficulty with the changing roles of men and women.</td>
<td>Hold group discussions on how the changing roles of males and females may affect career opportunities.</td>
<td>Assist staff to gain understanding of how societal attitudes impact on male/female role development.</td>
</tr>
<tr>
<td>Develop the interpersonal skills necessary for harmony in the workplace.</td>
<td>Counsel with students displaying a lack of interpersonal skills.</td>
<td>Do group work or team teaching to discuss how interpersonal skills are required for harmony in the workplace.</td>
<td>Do staff development on how interpersonal skills are essential for all students as they enter the world of work.</td>
</tr>
<tr>
<td>Become informed about up-to-date employment opportunities during and after high school.</td>
<td>Make employment opportunities and career planning materials available for student use.</td>
<td>Conduct groups to explore various employment and career opportunities.</td>
<td>Coordinate community resources to give students opportunities to learn of numerous and varied careers. Provide mentorships for students in areas they wish to explore.</td>
</tr>
</tbody>
</table>

Level I Level II Level III
High School Career/Vocational Competencies (continued)

Sample activities are illustrative only. Each district can use local resources, materials, and ideas.

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Counselors</th>
<th>Counselors + School Staff</th>
<th>Counselors + School Staff + Parents + Community + Business/Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form tentative career goals and strategies to reach them.</td>
<td>Assist all students to choose classes that would be required and/or beneficial for their career choices.</td>
<td>Do group work on goal setting and strategies for reaching goals.</td>
<td>Assist staff to develop curriculum that will help students set career goals and strategies to reach them.</td>
</tr>
<tr>
<td>Understand lifestyle preferences and relate them to occupational interests.</td>
<td>Work with individual students to discuss occupational interests.</td>
<td>Provide opportunities to discuss lifestyles and various occupational interests with community members.</td>
<td>Assist staff to incorporate information on various lifestyles and occupational interests into the curriculum.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I</td>
<td>Form tentative career goals and strategies to reach them.</td>
</tr>
<tr>
<td>Level II</td>
<td>Understand lifestyle preferences and relate them to occupational interests.</td>
</tr>
<tr>
<td>Level III</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Labor Market Terms

Labor Supply—People and Workers

Labor Supply. Includes all persons 16 years and older that are potentially available to join the work force.

Total Labor Force. Includes the civilian labor force (see definition below) and members of the Armed Forces stationed either in the United States or abroad counted by their place of residence.

Labor Force Participation Rate. Comprised of the proportion of the total civilian non-institutional population or a demographic subgroup, 16 years old and over, that is in the labor force.

Not In The Labor Force. Includes all civilians, 16 years old and over who are not classified as employed or unemployed. This group consists mainly of students, unsalaried homemakers, retired workers, seasonal workers during an "off" season who are not looking for work, inmates in institutions, disabled persons, and unpaid persons working less than 15 hours a week in a family business or farm.

Civilian Labor Force. Comprises the total of all civilians, 16 years old and over, classified as employed or unemployed and looking for work. The labor force counts one person to a job based on the person's place of residence.

Experienced Civilian Labor Force. Includes the employed and the experienced unemployed—that is, unemployed persons who have worked at any time in the past.

Civilian Work Force. Made up of all civilians, 16 years old and over, classified as employed on a place-of-work basis plus unemployment on a place-of-residence basis. The employment by place-of-work in the civilian work force, as opposed to the civilian labor force, is not adjusted for commuting in labor areas or for multiple jobholding (moonlighting).

Total Unemployment. Comprises of the number of persons, 16 years old and over, on a place-of-residence basis, who did not work at all during the reference week which includes the 12th of the month, were looking for work and were available for work during the reference week except for temporary illness. Also included as unemployed are those who did not work at all during the survey week, were available for work, and (a) were waiting to be called back to a job they had been laid off or (b) were waiting to report to a new wage or salary job scheduled to start within the following 30 days.

Unemployment Rate. Represents the number of unemployed as a percent of the civilian labor force (i.e., the sum of the employed and the unemployed).

Seasonally Adjusted. Comprised of data that has been statistically adjusted to remove the recurring seasonal pattern to better show the underlying trend.

Underemployed. Describes persons working full or part-time below their earning capacity or level of competence. The terms underemployment and underutilised are used interchangeably. Underemployment has also been defined as "involuntary part-time employment" (i.e., employment of a person on a part-time basis when full time work is desired).

Discouraged Workers. Describes persons not included in the unemployment count, who make no active attempt to find a job because they think none is available, or they believe they lack the skills necessary to compete in the labor market. Many discouraged workers are women and teen-agers, but the number of male adult workers typically increases during prolonged periods of high employment.

Economically Disadvantaged Individual. Describes an individual who is a member of a family (1) which receives cash welfare payments, or (2) which has a total annual income, in relation to family size and location, that does not exceed the most recently established poverty line.

81
levels determined in accordance with criteria established by the Office of Management and Budget (OMB).

Quit. A quit is a termination of employment initiated by the employee for any reason except to retire, to transfer to another establishment of the same firm, or for service in the Armed Forces.

Layoff. A layoff is a suspension from pay status lasting or expected to last more than seven consecutive calendar days, initiated by the employer without prejudice to the worker.

Occupational Mobility. Describes the movement of workers from one occupation to another. At times, this term is used to refer to the willingness or ability of workers to make this move. Occupational mobility can simply be a change in jobs because a worker wants to try something new.

Upward Mobility. Describes the movement in the work force toward jobs of higher socioeconomic status. Higher education is the main force behind upward mobility.

Career Ladder. Identifies a path of "upward" occupational mobility. It is a vertical progression from an entry-level position to a journeyman level position usually within the same occupational classification.

Career Lattice. Identifies horizontal and/or diagonal paths of occupational mobility leading from the entry level. Most often these paths link parallel paths of vertical or upward occupational mobility. A horizontal path or "lateral" occupational mobility is often called a job transfer while a diagonal path is often referred to as a transfer-promotional path. This "lateral" mobility usually occurs within a occupational field (i.e., engineering, accounting) but usually not the same specific occupational classification.

Geographic Mobility. Identifies the willingness of people to move from one geographic area to another to seek employment.

Labor Demand—Industries and Jobs

Labor Demand. Describes the need of employers to hire workers to fill job openings caused by growth or expansion of the firm or to replace workers who have left the firm.

Expansion Demand. Describes new job openings created by expansion or growth in a given occupation or industry. (See Labor Demand and Replacement Demand.)

Replacement Demand. Refers to the demand for workers existing because employers need to replace workers who die, retire, or leave their jobs to migrate to different areas or transfer to different occupations.

Entry Level Jobs. Jobs in which employers will accept and hire workers for which no work experience is required. Any job, even though training and/or educational requirements may be extensive, is considered entry level if no previous experience is required.

Training Level Jobs. Jobs where the employer expects to provide on-the-job training to the worker.

Job Vacancies. Defined as vacant jobs which are immediately available for filling, and for which the firm is actively trying to find or recruit workers from outside the firm.

New Hire. A temporary or permanent addition to the employment roll of an establishment. This includes those who have never before been employed by the establishment or former employees who were not recalled.

Recall. Permanent or temporary additions to the employment roll of persons specifically recalled to jobs in the same establishment of the employer following a period of layoff lasting more than seven consecutive days.

Occupational Shortage. Describes two labor market situations, both of which are characterized by a chronic shortage of workers needed to fill the available openings for an occupation. In one case, there is a lack of qualified workers to meet the demand. In the other, workers cannot be attracted to fill job openings under offered wages and working conditions.

Self-Employed Workers. Persons who work for profits or fees in their own unincorporated business, trade, or professional practice. Persons working in their own incorporated business are counted as wage and salary workers.

Current Employment Statistics (CES) Program (BLS-790). A federal/state cooperative program conducted by BLS in cooperation with state employment security agencies. It provides employment, hours, and earnings.
information on a national, state, and area basis in considerable industrial detail. Data is collected monthly from a sample of 180,000 non-farm establishments. From this data, over 2,600 separate published series are compiled nationwide each month. These contain data on non-agricultural wage and salary employment, production or non-supervisory worker employment, the number of women employed, and average weekly earnings. The monthly series are published for the nation as a whole, each of the 50 states, D.C., and the major labor market areas described in Employment and Earnings.

General Activity Terms

Industry. A generic term used in the compilation of economic statistics which indicates the primary type of goods or services produced by an establishment. Industries are classified in the Standard Industrial Classification Manual of 1972, according to three levels of industrial detail.

Job Families. A group of jobs closely related on the basis of similar job or worker characteristics required for successful worker performance. Examples of such characteristics are experience, training and education, duties performed, tools, machines, and other aids and materials used on the job. The Dictionary of Occupational Titles, Third Edition, Volume II includes a Worker Traits Arrangement. Jobs are categorized in 114 groups according to some combination of general educational development, specific vocational preparation, physical demands, and other worker characteristics typically required for those jobs.

Projections. Estimates of future possibilities based on current trend(s).

Forecast. Anticipated eventualities stated in terms of probability, not certainty.


Labor Markets

Labor Area. Consists of a central city or cities and the surrounding territory within commuting distance. It is an economically integrated geographical unit within which workers may readily change jobs without changing their place of residence. Labor areas generally contain one or more counties. Major labor areas usually include at least one central city with a population of 50,000 or more. In most instances, boundaries of major labor areas coincide with those of Standard Metropolitan Statistical Areas (SMSA's) as determined by the Office of Management and Budget (OMB) in consultation with a Federal interagency committee. The area normally takes the name of its central city or cities. In some cases, the boundaries of the labor areas cross state lines.

Standard Metropolitan Statistical Area (SMSA). Defined as a county or group of counties containing at least one city with a population of 50,000 or more, plus adjacent counties which are metropolitan in character and are economically and socially integrated with the central city. There is no limit to the number of counties so long as all criteria are met. SMSA's may cross state lines. Specific information on criteria for qualification as an SMSA are contained in Standard Metropolitan Statistical Areas 1975, Statistical Policy Division, Office of Management and Budget, Executive Office of the President.

Economic Indicators. Measurements of various economic and business movements and activities in a community, such as: employment, unemployment, hours worked, income, savings, volume of building permits, volume of sales, etc., whose fluctuations affect and may be used to determine overall economic trends. The economic time series can be segregated into leaders, laggards, and coinciders in relation to movement in aggregate economic activity.

Wages, Compensation and Earnings

Income. The amount of dollar income received from any of the following sources: (1) money wages or salary; (2) net income from nonfarm self-employment; (3) net income from farm self-employment; (4) social security, veterans' payments, or other government or private pensions; (5) interest (on bonds or savings), dividends, and income from annuities, estates, or trusts; (6) net
income from boarders or lodgers, or from renting property to others; (7) all other sources such as unemployment benefits, public assistance, alimony, etc. The amounts received represent income before deductions for personal taxes, social security, bonds, etc.

Job Analysis. Job analysis is the process of determining by observation, interview, study and recording, pertinent information relating to the nature of a specific job. It is the determination of the tasks which comprise a job and of the traits and skills required of the worker for successful job performance.

Current information on the labor market is something that cannot be provided in this handbook. The Wisconsin Career Information System provides annual updates of all information contained in that system. To complement this current source of information, four periodical publications are available throughout the year. Two of these are: Wisconsin Economic Indicators and Wisconsin Employment Outlook, published each month by the Wisconsin Department of Industry, Labor and Human Relations. These two publications cover the Wisconsin economy and the labor force in a summary fashion with tables, charts, and graphs supported by narrative. Both are available free upon request. For copies, write the Department of Industry, Labor and Human Relations, Box 7944, Madison, Wisconsin 53707.

Two additional publications, Monthly Labor Review and Occupational Outlook Quarterly, are produced by the U.S. Department of Labor, Bureau of Labor Statistics. These are available from the Government Printing Office, 517 South Wisconsin Avenue, Room 190, Milwaukee, Wisconsin 53203. The cost for Monthly Labor Review is $24.00 per year and Occupational Outlook Quarterly is $11.00 per year.

The following pages have been taken from these four publications and annotated to provide examples of the kind of information available and how it might be used. Only a few examples can be shown here. Each publication has extensive current information. These publications will complement the descriptive information and data provided in the Wisconsin Career Information System.
Examples from MONTHLY LABOR REVIEW

Chart 1. Employment changes by major industry division, fourth-quarter 1984-1985

Thousands

-250 0 250 500 750 1,000 1,250

-250 0 250 500 750 1,000 1,250

Mining
Construction
Manufacturing
Transportation and public utilities
Wholesale trade
Retail trade
Finance, insurance, and real estate
Services
Government

Chart 2. Employment in the service-producing and goods-producing sectors, seasonally adjusted, 1945-85

In millions


Service-producing
Goods-producing

NOTE Shaded areas indicate recessions as designated by the National Bureau of Economic Research

87 90
Examples from WISCONSIN'S EMPLOYMENT PICTURE

LOCAL AREA EMPLOYMENT RATE "PRIMARILY-AGED" (EPA = Standard Metropolitan "Central Area")

<table>
<thead>
<tr>
<th>Area \ Month</th>
<th>Preliminary</th>
<th>Revised</th>
<th>Year Ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appleton-Green Bay</td>
<td>12,200</td>
<td>$6.60</td>
<td>9.200</td>
</tr>
<tr>
<td>Eau Claire EWA</td>
<td>6,400</td>
<td>6.40</td>
<td>6.50</td>
</tr>
<tr>
<td>Green Bay EWA</td>
<td>6,000</td>
<td>6.10</td>
<td>6.10</td>
</tr>
<tr>
<td>Janesville-Beloit SDA</td>
<td>7,200</td>
<td>6.20</td>
<td>6.40</td>
</tr>
<tr>
<td>Kenosha EWA</td>
<td>6,200</td>
<td>6.20</td>
<td>6.20</td>
</tr>
<tr>
<td>La Crosse EWA</td>
<td>8,200</td>
<td>6.10</td>
<td>6.20</td>
</tr>
<tr>
<td>Madison EWA</td>
<td>9,200</td>
<td>6.10</td>
<td>6.90</td>
</tr>
<tr>
<td>Milwaukee EWA</td>
<td>45,800</td>
<td>6.10</td>
<td>42,200</td>
</tr>
<tr>
<td>Racine EWA</td>
<td>7,200</td>
<td>6.20</td>
<td>7,000</td>
</tr>
<tr>
<td>Sheboygan EWA</td>
<td>3,200</td>
<td>6.20</td>
<td>1,800</td>
</tr>
<tr>
<td>Wausau EWA</td>
<td>4,000</td>
<td>7.10</td>
<td>4,200</td>
</tr>
</tbody>
</table>

Area with major increase in unemployment.

Contact these Job Service Offices for more information on EPA data:
- Eau Claire 608/222-2000
- Green Bay 602/221-1157
- Janesville 608/755-3011
- La Crosse 608/755-3300
- Madison 602/221-1157
- Milwaukee 602/221-1157
- Racine 602/221-1157
- Sheboygan 602/221-1157
- Wausau 715/832-2200

Comparison of Wisconsin's unemployment to other states for one month and one year intervals.

Wisconsin's unemployment rate is increasing faster than the nation's.
Examples from WISCONSIN'S EMPLOYMENT PICTURE

WISCONSIN EMPLOYMENT PICTURE
LABOR FORCE AND EMPLOYMENT
January 1985 – August 1986

Graph shows 20 months of labor market movement

Gap between labor force and employment equals unemployment

Comments explain significant observations

EMPLOYMENT EXPANDED IN THE STATE
FOR THE SIXTH MONTH IN A ROW. BUT
CONTINUED LABOR FORCE GROWTH
SLOWED THE UNEMPLOYMENT DECLINE.

UNEMPLOYMENT RATE COMPARISON
WISCONSIN & U.S.
July 1982 thru August 1986

Four year comparison

WISCONSIN'S JOBLESS RATE
CONTINUES TO MOVE LITTLE
FROM EARLY 1985 ON; ABOVE
U.S. RATE AGAIN IN AUG. ST.

Shows relative position of Wisconsin's unemployment to the nation's unemployment.
Cyclical indicators respond to and/or reflect status of the economy.

WISCONSIN EMPLOYMENT ESTIMATES

<table>
<thead>
<tr>
<th>SEPTEMBER</th>
<th>Latest Month</th>
<th>Month Ago</th>
<th>Year Ago</th>
<th>Month Ago</th>
<th>Year Ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL NONFARM WAGE AND SALARY WORKERS</td>
<td>2051.9</td>
<td>2031.4</td>
<td>2016.1</td>
<td>1.0</td>
<td>1.8</td>
</tr>
</tbody>
</table>

- Unadjusted
  - Manufacturing: 527.1
  - Mining: 3.0
  - Contract Construction: 70.6
  - Transportation and Public Utilities: 96.4
  - Elec., Gas and Sanitary Services: 17.7
  - Wholesale Trade: 98.4
  - Retail Trade: 384.3
  - General Merchandises: 46.9
  - Finance, Insurance and Real Estate: 109.3
  - Banking: 28.8
  - Insurance: 36.4
  - Service and Miscellaneous: 436.0
  - Hospitals: 67.3
  - Private Education: 22.2
  - State Government: 326.4
  - Local Government: 212.3

90 93
When assessing future job opportunities, both the rate of growth and the number of new jobs need to be considered.

Projected change in employment, 1982-95

The chart illustrates the point that comparing percentages can be misleading when one occupation has significantly fewer employees than the other.

Women as a percent of labor force growth

Labor force growth will slow through the mid-1990's.
## The World of Work

### Executive, Administrative, and Managerial Occupations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank officers and managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health services managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel managers and assistants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School principals and assistant principals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Support Occupations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountants and auditors</td>
<td>H H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction and building inspectors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspectors and compliance officers, except construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel, training, and labor relations specialists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing agents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underwriters</td>
<td>H M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale and retail buyers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Engineers, Surveyors, and Architects

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Architects</td>
<td>H H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveyors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerospace engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical and electronics engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metallurgical, ceramics, and materials engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petroleum engineers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Estimates not available.
2 Less than 500.

Occupational Outlook Quarterly/Fall 1988