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ABSTRACT

This implementation guide is designed to be used by schools and school districts that wish to implement the "Career Pathways" program in their schools. The guide includes three sections. Section one provides an introduction to the "Career Pathways" system, including information on the program's philosophy and benefits. Section two describes implementation strategies and outlines a "Career Pathways" presentation to be adapted by a school or district. Section three contains resources including promotional materials, directions for using the Student Guide, and sources of career information. The guide contains 12 references. (KC)

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Career Pathway

An Implementation and Resource Guide

Prepared by
Office of Vocational Education
Arizona State University

Under contract to
STW/Vocational Technical Education Division
Arizona Department of Education

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Career Paths Toolbook, Section 1: pages 3-5; Section 2; Section 3: pages 25-49, pages 79-82, pages 167-172, pages 177-182, ©1994 Instructional Materials Laboratory, University of Missouri-Columbia, Columbia, MO. Used with permission.

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The information in the implementation guide has been compiled to be used by schools/districts pursuing the promotion and implementation of *Career Pathways*. The materials are intended to be adapted and modified by schools/districts to accommodate their unique student and family population, community interests, business interests, and desired outcomes.

Section One provides an introduction to the *Career Pathways* system. Section Two describes implementation strategies and outlines a *Career Pathways* presentation to be adapted by a school or district. Section Three contains resources including promotional materials, directions for using the Student Guide, and sources of career information.

**Section I. An Introduction to the
*Career Pathways System***

Change requires flexibility as well as a commitment to the process and the end result. Equally important is understanding the reason for making a change and the benefits that can be derived. Over the past decade, public attention has been drawn to the difficulties that many young adults have in finding their way in the changing economy and in earning a decent living. A broad-based effort is underway to better connect school with career opportunities and help young adults succeed in the workplace. The *Career Pathways* system is designed to provide students with focus and direction when planning for their futures as well as give them the resources, tools, and ideas necessary to succeed.

Overview of the *Career Pathways* Concept

- *Career Pathways* guide students through the exploration of careers that are grouped together because the people in them share similar interests, talents, and abilities. These careers may require different levels of education and training.
- *Career Pathways* are based upon a coherent sequence of courses that prepares students for a first job or for additional education or training.
- *Career Pathways* integrate academic and occupational learning.
- *Career Pathways* use school-based and work-based learning experiences as a basis for the curriculum.
- *Career Pathways* establish strong linkages among elementary, secondary, and postsecondary institutions and between schools and businesses. The business partnership ensures that classroom learning is relevant and that students receive a solid foundation in academic and workplace skills.
- *Career Pathways* provide a plan for all students, regardless of their interests, skills, or talents. Choosing a *Career Pathway* provides students with focus for making course selections and career decisions.

The *Career Pathways* Philosophy

- Many young people fail to make connections between school and careers. Schools should help students plan for careers by helping them become aware of all of the possibilities available to them and by providing them with multiple career experiences.
- A *Career Pathways* system, which focuses on clusters of related occupations, can help students focus on careers and begin making plans for their futures.
- Students need two things in order to choose a *Career Pathway*: knowledge of their interests and abilities and decision-making skills.
- Schools should develop comprehensive plans to implement a *Career Pathways* system.
- Choosing a *Career Pathway* is not a lifelong commitment but a place for students to begin. As students take different courses and learn more about themselves and different careers, they may change *Career Pathways*.

Benefits of Adopting the *Career Pathways* System

For students...

- *Career Pathways* provide a plan for all students, regardless of their interests, abilities, talents, or desired levels of education.
- *Career Pathways* assist students in setting long-term educational and career goals.
- Students learn about the options that exist for them after high school, such as getting a job, serving in the military, earning a certificate or degree at a community college or proprietary school, or earning a degree at a university.
- Work-based learning gives students hands-on experiences in the workplace.
- Students are more motivated to finish school because they see relevance in their coursework and extracurricular activities.
- Students have learning experiences in a variety of settings using a variety of teaching methods.
- In some instances, students can begin a postsecondary certification/degree program in high school which can be finished at the community college after high school. This allows students to earn college credit while they are in high school.

For family members...

- *Career Pathways* help families as they assist students with career goals and courses and activities that support those goals.
- The *Career Pathways* system provides students with a strong foundation in academic, employability, and occupational skills. This foundation ensures that students will be prepared for work, further education, and training and have the necessary skills to continue learning.
- Students are encouraged to explore a variety of careers by discussing occupations with family members. Family members are given the opportunity to share information one-on-one with the student and school counselor or as part of a group discussion in the classroom with other students.
- Students may be given the opportunity to begin a postsecondary certification/degree program in high school to be finished at the community college after high school. By earning college credit in high school, students' families can save on tuition and other fees and know that their students will have greater opportunities in the future.

For the school and district...

- *Career Pathways* can be adopted in any size school system with minimal costs. Already existing career exploration and career counseling programs can be used in the *Career Pathways* system. The system is designed to be flexible and adaptable to the needs of the school and/or district.
- The establishment of partnerships between the school/district and business and community partners can enhance the learning environment as well as provide vital support in ensuring system success. This support may take the form of providing counseling services, financial aid, work-based learning sites, or speaker bureaus.
- Implementing *Career Pathways* may decrease dropout rates. Students who are focused on a goal and can see the connection between their coursework and careers are more likely to stay in school.
- Implementing *Career Pathways* may increase the success rate of students on district- and state-directed assessments. Because the system is integrated and makes learning relevant, students will be more likely to perform well on assessments.

For business and community partners...

- *Career Pathways* support a better prepared workforce since students will learn basic employability skills as well as be given occupationally-specific training. They will also have learned the necessity of lifelong learning and the importance of updating their skills.
- Business partners benefit through their partnership role by helping schools determine those same skills and abilities for students as they are looking for in employees.
- Business and community partners can receive public attention for their work with schools/districts.

For postsecondary institutions (military service, proprietary schools, colleges, universities)...

- Students entering these institutions will not only be better skilled, but will have career goals and an education plan.
- Enrollment in these institutions may increase because students are more informed about their postsecondary options.
- *Career Pathways* provide a smooth transition between secondary and postsecondary institutions. Students may be enrolled in advanced placement programs (earning credit while in high school) and their *Career Pathway* may translate into a major at a college or university.

For the State of Arizona...

- Because students are focused, motivated, and well-trained they become valuable employees. Valuable employees mean competitive businesses, which in turn mean economic benefits to the state including the attraction of new businesses and the retention of existing businesses.
- The *Career Pathways* system is designed to serve all students whether they are in public, private, or charter schools. This means that all students are given the opportunity to benefit from the system.
- Because *Career Pathways* are designed to be flexible and adaptable to the state's needs, as well as to fit into existing systems, implementation costs should be minimal.

An Overview of the State of Arizona's *Career Pathways*

The 6 *Career Pathways* described on the following page were determined based upon information gathered from schools, districts, and departments of education around the country. Career paths described by the National Occupational Information Coordinating Committee and the Department of Labor were also examined. Finally, educational leaders in Arizona were consulted to determine the *Pathways* that best represent the industry base in Arizona as well as the training and education opportunities available.

Arts/Communications/Humanities Career Pathway

Occupations in this *Pathway* are related to the creative, visual, craft, and performing arts. Students in this *Pathway* are interested in pursuing careers in journalism/broadcasting, graphic design, music, interior design, or printing.

Business Systems Career Pathway

Occupations in this *Pathway* are related to business operation, administration, and management; and marketing and sales. Students in this *Pathway* are interested in pursuing careers in accounting, financial management, administrative support, or retail/wholesale sales or management.

Engineering/Industrial Systems Career Pathway

Occupations in this *Pathway* are related to the technology necessary to design, develop, install, and maintain electrical, mechanical, and structural systems. Students in this *Pathway* are interested in pursuing careers in the building trades, architecture, engineering, or automotive services.

Health Services Career Pathway

Occupations in this *Pathway* are related to the diagnosis and treatment of diseases, disorders, and injuries; laboratory technology; nursing; and therapy. Students in this *Pathway* are interested in pursuing careers in medical/dental assisting, veterinary medicine, nursing, or physical therapy.

Natural Resources Career Pathway

Occupations in this *Pathway* are related to the natural sciences, agriculture, and the environment. Students in this *Pathway* are interested in pursuing careers in agricultural operations/farm management, wildlife biology, forestry management, or groundskeeping.

Social/Human Services Career Pathway

Occupations in this *Pathway* are related to hospitality, personal and customer services, social services, education, legal services, and protective services. Students in this *Pathway* are interested in pursuing careers in teaching, law, recreation, or culinary arts.

Section II. Implementation

Elements for Success: Suggestions from Existing Systems

The elements outlined below form the basis for successful implementation of the *Career Pathways* concept. They were identified by schools in Oregon, Alabama, Iowa, New Hampshire, California, and Texas that have put the concept of *Career Pathways* into place. Even though each school has adapted the concept to its own situation, the basic elements remain the same.

- **Expecting high achievement.** This expectation is based on two assumptions made by the schools. The first is that all students can learn and achieve at high performance levels. The second is that course content will be sufficiently meaningful to the students and their parents to motivate the students to learn. Following through on these assumptions involves raising standards of achievement, eliminating the general track, recognizing multiple learning styles, integrating course content across and among academic and occupational disciplines, and establishing a coherent sequence of instruction.
- **Preparing for careers and further education.** The workplace now requires workers who understand and use technological applications, adapt rapidly to changing conditions, solve problems, communicate effectively, work in teams, and take responsibility for the quality of the product or services being provided. In order to succeed in the workforce, all students must be high academic achievers and must master a specialty in some occupation. Students must also be prepared for lifelong learning. It is recommended that schools restructure the curriculum around four to six *Career Pathways*, require all students to choose a *Pathway*, involve business and community representatives in designing the curricula, provide work-based learning experiences, provide career education and counseling to all students, and work with all levels of the education system to ensure an articulated curriculum.

Making the Change

The implementation of *Career Pathways* involves changes in staff roles, curriculum delivery, scheduling, and communication. The schools cited above had to overcome resistance to change through leadership, building understanding and support, involving stakeholders, training staff, and making a commitment to continuous improvement.

- **Leading change.** Ultimately, change occurs at the school level. The principal is the crucial leader in bringing about and supporting the change. Principals who are able to lead their schools through the change process have the following characteristics. They are knowledgeable and informed about various reform efforts being implemented in education generally. They make decisions based upon the careful collection and analysis of information. They understand the concept of continuous improvement. They are sensitive and responsive to the needs of the community as well as to the needs of the school. They involve others and seek input and consensus.
- **Building understanding and support.** School leadership invests time and resources to provide information on the need to restructure, on the changes to be made, on the benefits to be derived, and on the sources of support. Information is provided to staff and the community through meetings, orientation sessions, and public relations materials.
- **Involving stakeholders.** In order to involve stakeholders in decision making, schools need to organize committees -- some consisting of school staff only, and some including parent, business, labor, and community organization representatives as well as school staff. These committees research the problems and needs and then recommend changes, assist in making the changes, and assess and evaluate the changes as they are made.
- **Training staff.** Restructuring and redesigning the curriculum, changing teaching methods, and expanding career education and counseling all require extensive staff development. Schools should invest in extensive up-front and ongoing staff training to ensure the success of the restructuring and change in their schools.
- **Making a commitment to continuous improvement.** Restructuring is an ongoing process. Everyone involved needs to be trained and updated.

How to Implement *Career Pathways* in a School/District

Use this sample plan as a guide for your school/district. The actual implementation steps depend upon the size of the school/district and its organizational structure.

- **Help school administrators** understand and commit to the *Career Pathways* concept by describing the benefits of *Career Pathways*. Presenting information to the school board is also worthwhile.

A summary of benefits might include the following:

- *Career Pathways* provide a plan for all students regardless of their interests, abilities, talents, or desired levels of education.
 - Students see relevance in their coursework and extracurricular activities. They are more motivated and focused on finishing school.
 - Implementing *Career Pathways* can increase the success rate of students on district- and state-directed assessments. Because the system is integrated and learning is relevant, students will be more likely to perform well on assessments.
 - *Career Pathways* can be adopted at minimal cost by any school. Already existing career exploration and career counseling programs can be integrated into the *Career Pathways* system.
- **Organize a *Career Pathways* implementation committee** that represents administrators, counselors, faculty, and interested members of the community.
 - Discuss and identify how the *Career Pathways* system can benefit students and the school.
 - Decide if the *Career Pathways* concept is one the committee wants to support and implement.
 - Identify who needs to be informed. It is important to get faculty input and commitment.
 - Develop a plan that outlines the goals and time frame. Decide what steps need to be taken, by whom, and when.
 - Establish a plan to present the information to faculty, staff, students, parents, and community representatives.
 - **Develop or order the materials needed** to give presentations. Items might include copies of the Student Guide, posters, transparencies, multimedia components, and promotional materials such as brochures and fact sheets.

How to Present *Career Pathways* to Targeted Audiences

- **Counselors.** Conduct an inservice for all school counselors.
 - Have counselors review the *Career Pathways* concept by looking at the materials in this implementation guide and in the Student Guide.
 - Discuss the benefits of *Career Pathways*.
 - Discuss implementation strategies.
 - Discuss how currently used career resource materials will fit into the *Career Pathways* system.
- **Faculty and staff.** Make a 20-30 minute presentation to faculty and staff. (Refer to the sample *Career Pathways* presentation in this section.) A representative from a school that has already adopted *Career Pathways* may also be invited to share information about that school's experience.

Ask department chairs and/or faculty to determine how their courses fit into the *Career Pathways*. Consistent criteria will have to be developed and applied to make the final decision about where courses fit. It may be wise to select one person or group of people to make the final choices. Materials that show the connection between courses and *Career Pathways* can then be developed.

- **Students.** There are a number of ways to inform students about *Career Pathways*.
 - Hold individual student conferences.
 - Have counselors or faculty make classroom presentations.
 - Print articles in the school newspaper.
 - Develop bulletin boards and displays of *Career Pathways* posters.
 - Make presentations and hand out materials at open houses.
 - Make presentations at elementary and middle schools and at new student orientation meetings.
- **Family members and other adults in the community.** There are a number of ways to inform involved adults.
 - Send letters and information to all households.
 - Print articles in the school newsletter.
 - Print articles in the local newspaper. Request that a reporter come and learn about what you are doing.
 - Make presentations at parent/teacher organization meetings.
 - Make presentations and hand out materials at open houses.

Sample *Career Pathways* Presentation

The following presentation has been developed to help presenters answer common questions about *Career Pathways* and to make the following points:

- *Career Pathways* are for **all** students.
- A career decision should start with knowledge of one's interests and abilities.
- There are many career choices for each person.
- A career decision helps students select and see relevance in their courses.

Audience:

With minor adaptations, this presentation may be used with school boards, counselors, faculty and staff, students and their families, or interested adults from the community.

Suggested materials:

Brochures

Course catalogs

Fact sheets

Information on available work-based learning experiences

Posters

Copies of the Student Guide

Transparencies

I. Introduction: Overview of *Career Pathways*

A. What are *Career Pathways* ?

- *Career Pathways* guide students through the exploration of careers that are grouped together because the people in them share similar interests and talents.
- All *Pathways* include a variety of occupations that require different levels of education and training.
- In this system, there are six *Career Pathways*:
 - Arts/Communications/Humanities
 - Business Systems
 - Engineering/Industrial Systems
 - Health Services
 - Natural Resources
 - Social/Human Services

B. Who are *Career Pathways* for?

- **All** students. By selecting *Career Pathways*, all students can prepare for the future regardless of their interests, abilities, talents, or desired levels of education.

- C. How do *Career Pathways* help students?
- *Career Pathways* provide a plan for all students regardless of their interests, abilities, talents, or desired levels of education.
 - *Career Pathways* allow students to see relevance in their coursework and extracurricular activities. They are more motivated and focused on finishing school.
 - Students are given the opportunity to participate in work-based learning which provides them with real world, job-related experiences.
 - Students may have the opportunity to begin a postsecondary certification/degree program in high school to be finished at the community college after high school. This allows students to earn college credit in high school.
- D. What if students change their minds?
- A *Career Pathway* choice is not a permanent commitment.
 - As students have new experiences, they will learn new things about themselves and careers and may change *Career Pathways*. If they decide on new *Career Pathways*, they can discuss it with their counselors and adjust future course selections accordingly.
- E. What steps are involved in making a *Career Pathway* decision?
- Identify interests, abilities, and talents. (Step One in Student Guide)
 - Consider the possible careers in each *Pathway* in relationship to those interests, abilities, and talents. (Step Two in Student Guide)
 - Decide which *Career Pathway* seems to fit best. (Step Three in Student Guide)
 - Select courses that are related to the *Career Pathway* chosen. (Step Four in Student Guide)
- F. How can family members help?
- Help students identify interests, abilities, and talents by discussing strengths and weaknesses with them.
 - Share information about careers and work experiences.
 - Arrange for students to talk with people about careers that are of interest.
 - Help students in working through the Student Guide.
- G. What are the career preparation choices beyond high school?
- Work-based training: on-the-job training, internships, apprenticeships
 - Schools and programs: vocational/technical schools, community/junior colleges, colleges/universities, Job Corps
 - Military: skill training and financial assistance for college

II. Making a *Career Pathways* Decision: Activity

A. Explain that a *Career Pathway* decision needs to start with knowledge of one's self.

1. Have the group decide on an occupation of common interest.

Example: Teacher

2. Identify three to four strengths and interests needed to succeed at this occupation.

Examples: Patience
Desire to help people
Creativity
Organization

3. Ask the group to brainstorm other career possibilities for a person with these strengths and interests.

Examples: Corrections officer, teacher aide, social worker, tour guide.

Hint: If you need help coming up with careers, refer to Step Two of the Student Guide.

Point out that by knowing their strengths, students can identify and explore a variety of career options, rather than narrowing their focus to one particular occupation.

B. Show the importance of having students focus on a *Career Pathway* or group of careers, instead of on a specific occupation, by having the group discuss the differences in deciding on the following possibilities:

I want to be a teacher. vs. *I want to work in the field of education.*

Other examples:
I want to be a cook. vs. *I want to work in the hospitality industry.*

I want to be a psychologist. vs. *I want to help people solve problems.*

III. Show how making a *Career Pathway* decision can help with course selection.

Look at the Social/Human Services course plan in the Student Guide and have the group consider courses offered at their school that they could take if they wanted to work in the field of education.

IV. Have the group discuss their reactions to *Career Pathways* and how they see *Career Pathways* being used in their school.

Section III. Resources for Implementation

General Ideas for Using Implementation Guide Materials

These materials have been developed so that they can be combined in different ways and used for a variety of purposes. Every effort has been made to afford individual schools and districts the flexibility to adapt the information and materials to their unique system design and needs.

- Counselors can use the individual pages when working with students during career counseling and/or course selection.
- The materials can provide ideas for organizing a career resource center.
- Some pages can be used as handouts, transparencies, or posters during programs on career decision making. These materials also can be used in *Career Pathways* displays.
- Components can be used by faculty as they incorporate career information into their curricula. Several methods of using the student worksheets have been suggested by teachers, counselors, and parents. For example, the **Self-Interest Inventory** may be completed by the student in a one-on-one session with a counselor, in a homeroom period with a teacher, or at home with family members.

Ideas for Promotional Materials

Posters. Use the *Career Pathways* question and answer sheets and the information sheets to make posters for display in libraries, career resource centers, classrooms, and school display cases. Donate them to local business/community partners for display on site.

Transparencies. Use the *Career Pathways* question and answer sheets and the information sheets to make transparencies for use in presentations to families, students, school board members, business/community partners, and staff.

Multimedia. Use the information on the *Career Pathways* question and answer sheets and the information sheets as the basis for computer-generated presentations to families, students, school board members, business/community partners, and staff.

Brochures and fact sheets. Use the information on the *Career Pathways* question and answer sheets and the information sheets as the basis for developing brochures and fact sheets for distributing to families, students, school board members, business/community partners, and staff. The material can also be used in school catalogs and course guides.

➡ What Are *Career Pathways*?

- ➡ *Career Pathways* are clusters of occupations/careers that are grouped together because the people in them share similar interests, talents, and abilities.
- ➡ All *Pathways* include a variety of occupations that require different levels of education and training.
- ➡ In the Arizona system, there are 6 *Career Pathways*...

Arts/Communications/Humanities

Business Systems

Engineering/Industrial Systems

Health Services

Natural Resources

Social/Human Services

➡ Who Are *Career Pathways* For?

➡ *Career Pathways* are for ALL students

By selecting *Career Pathways*, all students can prepare for the future, regardless of their interests, abilities, talents, or desired levels of education.

➡ How Do *Career Pathways* Help Students?

- ➡ They provide a plan for students regardless of their interests, abilities, talents, or desired levels of education.
- ➡ They allow students to see relevance in their school courses and extracurricular activities. Students are more motivated and focused on finishing school.
- ➡ They allow students to have a variety of learning experiences. Students' learning styles are an important component in planning courses and learning experiences.
- ➡ They help students select work-based learning activities and part-time employment. They can guide students' participation in programs like internships and tech prep.

▣▣▣▣▶ **What If Students Change Their Minds about *Career Pathways*?**

- ▣▣▣▣▶ A *Career Pathway* is not a permanent commitment.

As students have new experiences, they will learn new things about themselves and may change *Career Pathways*. If they decide on new *Career Pathways*, they can discuss it with their counselors, teachers, and family and adjust future course selections accordingly.

➡➡➡➡ **What Steps Do Students Take in Selecting a *Career Pathway*?**

- ➡➡➡➡ Identify interests, abilities, and talents.
- ➡➡➡➡ Consider the possible careers in each *Pathway* in relationship to those interests, abilities, and talents.
- ➡➡➡➡ Decide which *Career Pathway* seems to fit best.
- ➡➡➡➡ Select courses that are related to that *Career Pathway*.

➡ How Can Family Members Help Students Choose a *Career Pathway*?

- ➡ Help students identify interests, abilities, and talents by discussing strengths with them.
- ➡ Share information about careers and work experiences.
- ➡ Arrange for students to talk with people about careers that are of interest.

Arts/Communications/ Humanities



People who work in these careers are creative, imaginative, innovative, and communicate ideas successfully. They might work in advertising companies, television/radio stations, publishing houses, or run their own businesses.

They might be:

**Announcers
Copywriters
Recording engineers
Reporters**

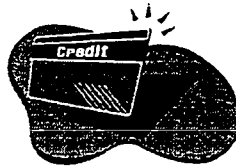


**Actors
Dancers
Musicians**

**Artists
Graphic designers
Photographers
Typesetters**



Business Systems



People who work in these careers are organized, work with numbers and ideas, and plan activities. They might work in resorts, accounting firms, department stores, or run their own businesses.

They might be:

**Administrative assistants
Bookkeepers
Secretaries**



**Advertising agents
Retail managers
Salespersons**

**Accountants
Financial managers
Hotel managers**



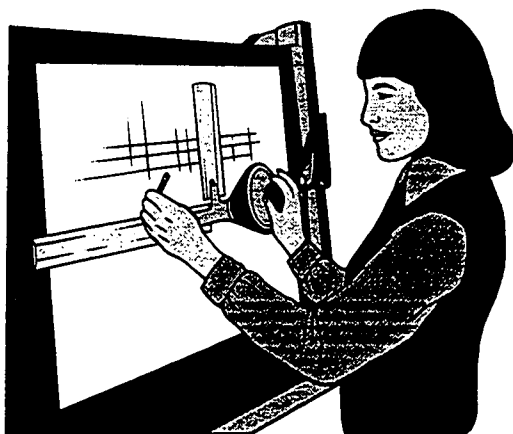
Engineering/ Industrial Systems



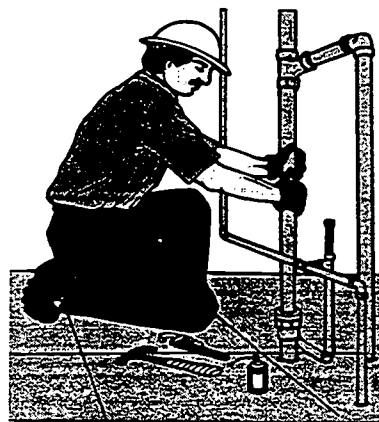
People who work in these careers design and build, like to know how things work, and are practical. They might work in architectural firms, automotive service shops, utility companies, or run their own businesses.

They might be:

**Architects
Drafters
Engineers**



**Carpenters
Electricians
Plumbers**



**Automotive mechanics
Electronics technicians
TV/Radio repairers**

Health Services



People who work in these careers are interested in how the body works, are observant and organized, and want to help others toward wellness. They might work in hospitals, medical offices, hospices, or run their own businesses.

They might be:

Dental assistants
Emergency medical technicians
Medical laboratory technicians

Licensed practical nurses
Registered nurses



Dentists
Optometrists
Physicians

Natural Resources

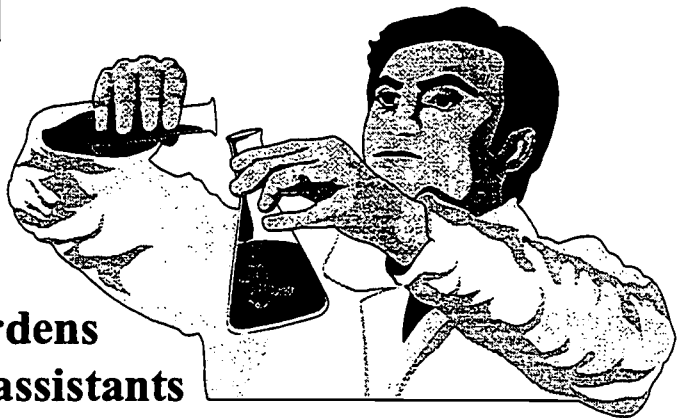


People who work in these careers are interested in plants and animals, are observant, and solve problems. They might work at farms and ranches, landscaping companies, research laboratories, or run their own businesses.

They might be:



**Farmers
Greenskeepers
Landscapers**



**Foresters
Game wardens
Research assistants
Soil conservationists
Wildlife biologists**

Social/Human Services



People who work in these careers are friendly, outgoing, and like to work with people. They might work in social service agencies, schools, restaurants, or run their own businesses.

They might be:

**Coaches
Librarians
Ministers
Social workers
Teachers**



**Chefs
Food service directors
Waitpersons**



**Cosmetologists
Fashion coordinators
Housekeepers**

**Attorneys
Firefighters
Law enforcement officers**

Using the Student Guide

Use the Student Guide as part of students' career and workplace exploration. It can be used in its entirety as a unit in a career exploration class or, as one school plans to do, as a unit in a social studies class. Individual exercises can be conducted with small groups of students or an entire class, or as part of a special assembly with family members present. In any event, coordination between teachers and counseling staff is essential to the successful and productive use of the Guide. Use the Guide:

- when helping **individual students** to decide on a *Career Pathway* or career field, make course selections or changes, or learn about career preparation options.
- when making *Career Pathways* presentations.
- when making presentations at elementary or junior high school orientation meetings.
- when introducing *Career Pathways* or making presentations to administration, counselors, and faculty.
- when making presentations to parents and other interested adults.
- when mass mailing a letter of introduction and explanation about *Career Pathways* to students' families.

Teachers and counselors may wish to provide school-specific information for their students in the form of a handout, including information on:

- suggested sequences for core classes;
- school-specific electives for each *Career Pathway*;
- available work-based experiences such as job shadowing and co-op;
- graduation and university entrance requirements;
- requirements for special certificates (like college prep or tech prep);
- courses that are part of articulation agreements, or that meet college/university entrance requirements;
- other school-related activities (clubs, sports, community organizations, vocational student organizations) for each *Career Pathway*.

The Student Guide is arranged to take students through four steps in the career decision-making and planning process.

- **Step One: Identify Interests, Talents, and Abilities.** This section includes a **Self-Inventory** which students can use to identify their interests and talents and think about desired job characteristics. Use this as a beginning exercise for students to start thinking about what they might look for in a job.
- **Step Two: Gather Career Information.** This section includes a career planning quiz, information on trends in the workplace, a budgeting exercise, and a priority-setting exercise. Use these activities to help students relate what they found out in the **Self-Inventory** to what they can expect on the job and how a job can have an impact on how they live.
- **Step Three: Make an Initial *Career Pathway* Selection.** This section includes exercises designed to have students identify and explore careers they might be interested in pursuing. Their choices should emphasize what they learned in Steps One and Two. Step Three also includes a ***Career Pathways Survey*** to help students make an initial *Pathway* selection.
- **Step Four: Select Courses Related to the *Career Pathway*.** This section includes information on the connection between high school courses and careers and templates for course plans and individual *Career Pathways* plans. Once students have chosen their *Career Pathway*, it is important for students to form a plan of study that will help them achieve their goals. Plans of study show students the many choices they have for coursework during high school and help them think about what they want after completion of their secondary education. The plan of study in the Student Guide should be kept in students' folders and updated at least once a year. It can be attached to the course plan.

The Workplace Connection: Providing Work-based Learning Experiences for Students

Work-based learning is a vital component of the *Career Pathways* system. This component provides students with real world, job-related learning experiences and lends relevancy to their school-based coursework.

Ultimately, the *Career Pathways* system should provide students with experience in all aspects of an industry. These aspects include the following:

- **Planning.** This explores the various forms of business ownership and the relationship of the industry to the economic, political, and social context.
- **Management.** This addresses methods typically used to manage enterprises over time within the industry.
- **Finance.** This examines ongoing accounting and financial decisions and different methods for raising capital to start or expand enterprises.
- **Technical and production skills.** These cover specific production techniques and alternative methods for organizing the production work.
- **Underlying principles of technology.** These provide an integrated study across the curriculum of the mathematical, scientific, social, and economic principles that underlie the industry's technology.
- **Labor issues.** These examine worker rights and responsibilities, labor unions, and labor history.
- **Community issues.** These explore the impact of the industry on the community and the community's impact on and involvement with the industry.
- **Health, safety, and environmental issues.** These are examined in relation to both the workers and the larger community.

A focus on a strong understanding of and experience in all aspects of an industry has a number of advantages.

- **Transferable skills.** Students who study and work on all the basic issues facing an industry are equipped to stay within an occupation whose specific technical skills requirements change, move to a different job within that industry, or work in a different industry that faces similar issues. Students get the benefits of hands-on, contextual learning without the risk of learning a set of skills that may become obsolete.

- **Economic development.** The aspects outlined above are the skills needed for community economic development, including self-employment and small business ownership or management. This is especially important for students and communities where good jobs are not readily available.
- **Increased integration of learning.** This approach serves as a tool for integrating content and helping students master academic standards.

Several work-based learning experiences exist for students. Those listed below generally follow the precepts of an industry-wide, all aspects approach. Work-based learning is not confined to the work site, but can exist on the school campus as well. Such school-based work experiences include the following.

- **School-based enterprises.** In a school-based enterprise, students produce or provide goods or services to students, faculty, and/or community members. Examples include child care centers, restaurants, convenience stores, and radio stations. School-based enterprises can generate revenue to support schools and their programs.
- **Career academies.** In academies, academic and technical content are integrated. Students stay together in most of the same classes within the academy. There are three core elements to a career academy: 1) a school-within-a-school structure starting in the 9th or 10th grade and continuing through graduation, 2) integration of academic and vocational instruction centered around an occupational theme such as human services or business management, and 3) active employer involvement in the form of mentorships, student internships, and guidance on career preparation.

Academies are generally guided by an industry-based board with members representing the career fields for which the students are being prepared. Board members provide after-school, summer, and permanent jobs to students. The board decides on and applies high standards to the academies.

- **Customer service labs (service learning labs).** These are a type of school-based enterprise and are structured to provide a service from the school lab to the outside public. School-based customer service labs can provide hands-on experience for students and can be realistically linked to the jobs in the career area found in the work environment or the community. The labs are operated like a real business so the students experience the range of activity appropriate for the career field.
- **Job-shop labs.** These are occupational labs that take in outside work from people in the community. Examples include automotive repair facilities and building construction sites. It is important that such labs be operated as a business enterprise so students will have an experience that resembles one in the workplace.
- **Job-simulation labs.** These provide students with experiences that simulate those in the workplace. A common example is a business classroom in which work stations model those found in the workplace.

- **Mock business/industry projects.** These projects use role-playing to simulate work experiences. Students may also mass produce items so they can experience the manufacturing process.
- **Class and organization projects.** These are service projects, often sponsored by a school organization, that can be used as fundraisers. Students receive relevant, hands-on experiences that integrate learning.

Work-based experiences at the work site can be paid or nonpaid. Some examples of both kinds of experiences follow.

- **Job shadowing.** Students "shadow" an employee at a job site, observing tasks and asking questions related to the job. This shadowing is usually one day long and involves one occupation. Students choose the occupation based upon their interests, abilities, and aptitudes. Teachers match career choices with available business and industry sites. The initial contact with the business or agency is made by either students or teachers. Shadowing sites can be located through personal contacts, business directories, business organizations, and unions. Before beginning the shadowing experience, students need to do research in order to know basic information about the occupation to be shadowed. Job shadowing is designed to increase career awareness, help model student behavior through examples, and reinforce the link between classroom learning and work requirements. Almost any workplace is a potential job shadowing site.
- **Cooperative education.** This experience includes a well-structured plan that integrates classroom experience and workplace experience. Co-op programs feature agreements between schools and employers to provide on-the-job training that directly relates to students' areas of study. The experience provides students with information on the operation of the business world and helps them clarify career goals and build confidence and maturity. This is the oldest and most widely used model of work-based learning. Actual implementation often varies with respect to the objectives and extent of coordination.
- **Clinical experiences.** These are frequently used by health occupations programs. They require close supervision and are very closely linked to classroom study. The course of study, work experience, and adequate scores on an external examination are required for licensure and subsequent employment in the field.
- **On-the-job training.** This occurs in the workplace and requires active involvement of a worksite mentor. It is crucial that students understand the connection between their on-the-job training and coursework.
- **School-linked summer employment.** This provides students with meaningful full-time experiences. When carefully linked to students' *Career Pathways*, these experiences can reinforce the school-based part of the students' educational experiences.

- **Community service learning.** This experience links students with community service activities which can help the community and provide students with opportunities to practice broad work skills while making contacts for future employment. It is beneficial for these experiences to be integrated into the classroom.
- **Youth apprenticeship.** This model serves students in a long-term, specialized, industry-based school located at the worksite. The programs extend from high school through at least 1 year of postsecondary education. Students are paid for worksite learning and receive work-based learning curriculum which is hands-on and competency-based. The curriculum covers theoretical aspects of the career field and is highly individualized, allowing for open-entry/open-exit based on completion of the required academic and workplace competencies.

Teachers work closely with industry instructors or mentors to create and deliver curriculum and to discuss, guide, and monitor student progress. Students receive high school diplomas and/or certification in occupational areas upon completion of required competencies.

This design includes counseling, on-site day care, health benefits, and other support services which can be used by students and all employees.

Other ways to provide students with work-based learning include the following, which are most appropriate for younger (elementary or early middle school) students.

- **Community speakers.** Men and women representing local industries, businesses, organizations, and professions are an important resource. Speakers have many stories and experiences to share with students about themselves, their work, and their organizations. Guest speakers can help students understand the world of work and offer an opportunity to demonstrate the connection between what goes on in the classroom and what goes on in the workplace.
- **Field trips.** A field trip provides students with the opportunity to leave the classroom and visit various places of business, both private and government-based. Students should be allowed to observe and investigate activities related to a specific field and a career development objective. Field trips extend the learning environment beyond the classroom and show the relationship between the classroom and the workplace.

Establishing Student Portfolios

Maintaining student records of achievement and career goals is essential to the *Career Pathways* system. Student-developed, and teacher/counselor-supported, portfolios are one way to do this. These folders or portfolios hold the selected plans of study and other career information such as résumés, cover letters, occupational information, interest inventories, assessments, records of work-based and community-based paid and nonpaid experiences, and other information showing that students are engaged in the career development process. The portfolios should be easily accessible to students, teachers, family members, counselors, and employers or employment mentors. The portfolios should be portable; be subject to review, revisions, and replacement; and travel with students as they change grade levels.

Portfolios are a collection of students' work and accomplishments. They are individualized and should represent students' best work as well as areas needing improvement. The preparation of portfolios allows students to document their achievements and goals. In addition, keeping track of this progress urges students to strive toward a certificate of mastery or achievement. Many benefits derive from the establishment of portfolios, not only for students but for the school and community as well.

- **Benefits for students.** In developing their portfolios, students learn the importance of keeping track of their educational progress and career planning activities. The portfolios demonstrate an assessment of a wide range of tasks. The development process assists students in highlighting their skills and abilities, an important tool in their future job search. Other benefits include:
 - taking responsibility for putting together portfolio materials that best demonstrate their strengths and abilities;
 - identifying, practicing, and improving technical or academic skills needing improvement;
 - learning more about careers in their chosen *Career Pathway* as well as courses and work-based experiences necessary and appropriate for achieving those careers;
 - improving skills related to portfolio development, including writing and research;
 - increasing awareness of the relationship between attainment of career goals and personal growth and achievement.

- **Benefits for the school.** At the school site, portfolios are instrumental in:
 - providing a process of accountability and documentation;
 - offering a means of articulation among school levels;
 - providing validation of the school's efforts to address students' affective, educational, and career planning needs;
 - offering an opportunity for the school to integrate its curriculum;
 - establishing a consistent approach for all students.

- **Benefits for the community.** At the community level, portfolios are important in:
 - helping to prepare students for the work force since many large companies are now requesting transcripts and portfolios for documentation of work-based learning skills when hiring employees;
 - addressing the need for more positive work attitudes;
 - involving families and business/community partners in the implementation process;
 - identifying family and business/community members as key players in the career planning process;
 - providing the opportunity for students to bring tangible evidence of their skills, accomplishments, and perspectives to the job search.

There are no required components in students' portfolios. Students should be encouraged to develop their portfolios according to their own educational and career goals. Suggestions for components to be included follow.

- **School-based experiences.** This includes the course plan and examples of class projects. Possible items:
 - Documentation of academic and technical competencies achieved
 - Transcripts
 - Test scores
 - Writing or research projects
 - Photos or videos of class projects
- **Work-related experiences.** This includes lists of jobs students have held along with the skills and knowledge acquired. Full-time, part-time, and volunteer work should be included. Possible items:
 - Internships
 - Job shadowing experiences
 - Class projects
 - Documentation of workplace skills demonstrated on the job
 - Photos or videos of work projects
 - Employer or mentor evaluations
 - Industry certificates
- **Career Pathway individual plan.** This includes the individual plan and materials that highlight students' career preparation experiences. Possible items:
 - A copy of the Student Guide
 - Career assessments and aptitude/interest inventories
 - An outline of career and educational goals
 - A résumé
 - Letters of application
 - Letters of reference

- **Activities, awards, and community service.** This includes descriptions of students' special interests, activities, and achievements in school and the community. Possible items:
 - Descriptions of leadership activities
 - Extracurricular activities like sports and clubs
 - Hobbies
 - Awards
 - Volunteer or service learning experiences

Portfolios are flexible documents. As stated above, students should be encouraged to develop their portfolios according to their own educational and career goals. However, there are certain criteria that need to be followed to ensure that the portfolios serve their purpose and can be used successfully by the students. The portfolios must be:

- **Endorsed by the school.** Schools must support the portfolio philosophy and development process.
- **Supported by teachers and counselors.** Teachers and counselors must provide assistance, guidance, and support to students during the portfolio development process.
- **Compiled and managed by students.** Students must be personally responsible for the development and maintenance of their portfolios.
- **Continuously maintained.** Students need to know that the development of their portfolios is not over when the program is completed or when they get their first job. The portfolios should be added to and modified as students gain work experience and additional learning.

These guidelines for developing the *Career Pathways* portfolio are to be used by teachers and students when putting together portfolios. Teachers and students should be aware of what items can be included in the portfolios and how they should be selected.

- **Collecting.** To begin the process of developing portfolios, students can collect items for working portfolios. These working portfolios may include samples of favorite projects or work and be stored in expandable folders. As samples increase in number, students should evaluate them and choose the best pieces to display in the *Career Pathways* portfolios.
- **Organizing.** Portfolios may be organized in a variety of ways including in a binder or folder, or on diskette. School sites may wish to develop a customized system for students to use to compile portfolio items. Organization and neatness are very important as the items in these portfolios are meant to represent students' best work and an overall picture of their skills and abilities. An introductory letter and/or table of contents will assist readers in studying the materials.

- **Reviewing.** Students can maintain their portfolios by preparing a list of all of the pieces contained in them. The list should be edited and expanded as the students attain new skills and abilities or improve existing skills. This constant review of the *Career Pathways* portfolios not only ensures their quality, but keeps the students focused on their career goals.
- **Updating.** In order to maintain high-quality portfolios, students should review them often and update the contents so they represent their best work. Students should continuously add materials like awards, certificates, and samples of work. If students decide sections or pieces of the portfolios need improving, they should be removed, revised, or replaced.

Promotion of the portfolio concept is important to the system's success. Portfolios represent a different (and sometimes unfamiliar) type of assessment and method of tracking student achievement. Therefore, helping different groups understand the important role of portfolios in helping students achieve career success is essential.

- **To students.** Emphasize the use of the portfolio as a tool to be used in helping them get a job or enter college. Consider the following strategies for initiating students into the portfolio process and maintaining their motivation.
 - Talk with students about portfolios. Make the concept part of their school life.
 - Dedicate an area of the classroom to portfolios. Showcase student progress or examples of portfolio work.
 - Have former students talk about the development and use of the portfolio.
 - Investigate ways in which students can get credit in other classes for work they do for the portfolio. For example, students' career research may also fulfill a writing assignment in a language arts or social studies course.
 - Have students work in small groups or with partners to share ideas, review work, and get feedback from one another.
 - Showcase an exemplary work sample in the school newspaper. Contact a journalism student to write articles about the portfolio project.
- **To other school personnel.** Having the support of colleagues and administrators is vital to the success of the portfolio concept. They need to understand the usefulness and importance of portfolios to the success of students.
 - Share examples of portfolios with counselors and take time to explain the portfolio's value as an important career-training activity.
 - Establish a regular time with administrators to discuss progress with the portfolios.
 - Invite colleagues to attend a portfolio presentation where students share and reflect on their work.

- **To family, business, and other community members.** Portfolios can help form powerful linkages between the school and the community. Community members need to know what to expect from student portfolios. Having outside support and participation not only acknowledges students' work but validates the importance of their achievements beyond the classroom.
 - Have students present the portfolio concept to families at open houses. Ask families to assist in assembling and reviewing different components of the portfolio.
 - Write a press release for the local newspaper or have a reporter do a story.
 - Arrange to be on the agenda at school board meetings. Introduce portfolios, explaining their strengths and benefits and how they fit into the *Career Pathways* system. Have students attend the meeting and show samples of their work and talk about what they have learned.

The following resources can be used as examples in guiding students and staff through the portfolio development process.

- **Ohio Career Passport**

The *Ohio Career Passport* is a folder containing formal documents that describe the marketable skills of the vocational program completer. It is designed to assist students in making the transition from school to work, job seeking, and career planning by presenting skills and knowledge acquired through school-, community-, and work-based experiences.

Contact:

Ohio Department of Education
Division of Vocational and Career Education
65 S. Front Street, Room 907
Columbus, OH 43266-0308
(614) 466-3430

- **Student Managed Portfolio**

This portfolio is designed to measure students' achievement. The *Student Managed Portfolio* addresses three broad areas critical to future job success: academic skills, personal management skills, and teamwork skills. The system allows students to collect and document proof of these skills and use the information in creating a résumé, completing an application, and preparing for a job interview.

Contact:

The Van Buren Intermediate School District
Vocational-Technical Center
250 S. Street
Lawrence, MI 49064
(616) 674-8001

- **Career Options Portfolio**

The *Wisconsin Career Options Portfolio* is a folder with pocket inserts labeled self-assessments, work and community experiences, standardized tests and inventories, educational experiences, career options or goals, future education or training, and employment/employability skills. Brief descriptions are provided to guide students in compiling materials to include in each section of the portfolio.

Contact:

Center on Education and Work
Education Sciences, Room 1078
University of Wisconsin, Madison
1025 W. Johnson Street
Madison, WI 43706
(800) 442-4612

- **Career-Technical Assessment Project Portfolio**

This portfolio is awarded to students who have mastered curriculum standards related to their career-technical program, met career performance standards that represent general workplace readiness skills, and demonstrated academic skills and knowledge required for success in their career-technical field.

Contact:

Far West Laboratory for Educational Research and Development
730 Harrison Street
San Francisco, CA 94107-1242
(415) 565-3000 (415) 565-3012 (fax)

- **Career Development Blueprint**

This folder requires students to compile the following materials: career planner; educational planner; career skills checklist; and cumulative record of assessment including interest inventories, assessments, and proficiency tests. Students begin preparing the folder in the ninth grade and work to document educational plans and career goals.

Contact:

Ohio Department of Education
Division of Vocational and Career Education
65 S. Front Street, Room 912
Columbus, OH 43266-0308
(614) 466-5718 (614) 644-5702 (fax)

- **The Personal Career Portfolio**

The *Personal Career Portfolio* assists students in implementing a career action plan and preparing for an interview. This portfolio is used by students to present their skills in a clear and concise manner. The portfolio is accompanied by the Job Finder's Guide. This booklet helps students develop a quality résumé and cover letter, improve job campaign techniques, and complete job applications.

Contact:

The Los Angeles County Office of Education
9300 Imperial Highway
Downey, CA 90242-2890
(310) 922-6860

- **Career Cluster Folder/Portfolio**

The *Career Cluster Folder/Portfolio* provides a basic framework for students to develop their own career portfolio throughout their high school years. Inside the folder, students record such information as subjects completed and number of credits earned, career goals, work experience, honors and awards, and resource people. Additional career documentation may be contained in the folder as well.

Contact:

Oklahoma Department of Vocational and Technical Education
Guidance Division
1500 W. Seventh Street
Stillwater, OK 74074
(405) 743-5157

- **New Standards Portfolio**

The *New Standards Portfolio* project is piloting the development of portfolios for language arts and mathematics. Over the next couple of years, the project is expected to expand to include documentation of skills in science and applied learning as they relate to effective participation in the workplace.

Contact:

New Standards Project
The Learning Research and Development Center - Room 408
University of Pittsburgh
3939 O'Hara Street
Pittsburgh, PA 15260
(412) 624-8319

- **High School Graduation Portfolio**

The Harrison High School District *High School Graduation Portfolio* assists students in identifying key skills and sharing those skills through college applications and job interviews. The portfolio indicates that graduates have mastered the skills necessary to move successfully from high school to continued education or the world of work. The required skills have been incorporated into three and one half years of courses.

Contact:

Harrison School District
2755 Janitell Road
Colorado Springs, CO 80906
(719) 576-8522

- **Boley Skills Center Portfolio System**

The *Boley Skills Center Portfolio System* organizes and displays job related skills, educational skills, employability skills, and career development documents. The system includes certificates of accomplishment and assists students in developing interviewing skills.

Contact:

Ed Jefferson
Boley Vocational-Technical Skills Center
P.O. Box 308
Boley, OK 74829
(918) 667-3768

Sources of Career Information

- **Career Search.** This is a complete career information system offering the most current and comprehensive occupational/educational information available. The entire database is revised and updated yearly to reflect changes in the workplace and in educational institutions. Career Search provides career and education information for all users regardless of aptitude, interests, or educational background. The database contains in-depth and cross referenced files: Career File, College File, College Major File, Military File, Apprenticeship File, School Subject File, and College Letter Writer.

Visit your school resource center or public library or contact:

COIN Educational Products
3361 Executive Parkway, Suite 302
Toledo, OH 43606
1-800-274-8515

- **Occupational Outlook Handbook.** This handbook is published by the U.S. Department of Labor, Bureau of Labor Statistics. It contains descriptions of over 250 jobs and details on the Nature of Work, Related Occupations, Earnings, Sources of Additional Information, Training Advancement, Future Employment Outlook, and Employment Opportunities.

Visit your school resource center, public library, or state Department of Labor, order from the Superintendent of Government Documents, or contact:

JIST Works, Inc.
720 N. Park Avenue
Indianapolis, IN 46202-3431
1-800-648-JIST

- **The Complete Guide for Occupational Exploration.** This is an invaluable resource for job seekers and career changers. Over 12,000 jobs defined by the U.S. Department of Labor in the *Dictionary of Occupational Titles* are organized into 12 interest areas of 66 work groups and 348 subgroups. Occupations are cross referenced by interests, school subjects, military experience, previous experience, leisure and home activities, and work values.

Visit your school resource center or public library or contact:

JIST Works, Inc.
720 N. Park Avenue
Indianapolis, IN 46202-3431
1-800-648-JIST

- **The Enhanced Guide for Occupational Exploration.** This resource covers 2,500 of the most widely-held jobs. Occupations are organized by clusters and a full-text job description and valuable technical data for job seekers is provided for each occupation. An index enables users to locate information by interests, skills, industry, worker traits, related work groups, and other criteria. The guide is cross referenced to other standard career information resources.

Visit your school resource center or public library or contact:

JIST Works, Inc.
720 N. Park Avenue
Indianapolis, IN 46202-3431
1-800-648-JIST

- **To Spin a Web: Job, Career, and Labor Market Information on the Internet.** This publication offers direction for finding career and labor market information on the world wide web. It offers web site addresses for career and job information as well as addresses for labor market and education data resources.

Contact:

National Occupational Information Coordinating Committee
2100 M Street, Suite 156
Washington, DC 20037
(202) 653-5665 (telephone)/(202) 653-2123 (fax)
e-mail: noicc@digex.net
<http://www.profiles.iastate.edu/ided/ncdc/noicc.htm>

- **Job service offices.** Arizona's job service offices have information on about 15 to 20 percent of job openings in the state. America's Job Bank system contains all job service listings from every state and is available at job service centers throughout the country. Each of the regions below has more than one job service office. Use the listed contact to obtain referrals to a more convenient location if necessary.

Phoenix Metropolitan Area
4635 S. Central Avenue
Phoenix, AZ 85040-2148
(602) 276-5587

Tucson Metropolitan Area
7750 E. Broadway Road
Tucson, AZ 85710-3901
(520) 293-1919

North, Northeast (serving Cottonwood, Flagstaff, Prescott, Show Low, Winslow)
397 Malpais Lane, Suite 9
Flagstaff, AZ 86001-6281
(520) 779-4513

Colorado River Area (serving Bullhead City, Kingman, Lake Havasu City, Yuma)
301 Pine Street
Kingman, AZ 86401-5561
(520) 753-4333

Central (serving Casa Grande, Coolidge, Globe, Payson)
401 N. Marshall Street
Casa Grande, AZ 85222-5244
(520) 426-3529

South, Southeast (serving Douglas, Nogales, Safford, Sierra Vista)
2981 E. Tacoma Street
Sierra Vista, AZ 85635-1398
(520) 458-4005

- **Libraries.** Local libraries can provide labor market information and have telephone books and Sunday newspaper editions of large U.S. cities. The Yellow Pages can be used to identify potential employers by type of business. Nation-wide compilations of company profiles are published and are usually organized by product or service and geographical area. Many of Arizona's libraries now offer computer services, including access to the Internet, at little or no cost. Through compact discs, bulletin boards, data bases, and on-line services computers can provide access to a wealth of resource data, including associations, job listings, and direct links to companies.
- **Career centers.** Career counseling centers at community colleges and universities can offer testing services and data base access at little or no cost to users. Community colleges, as well as other educational institutions, can be found in the Yellow Pages under "schools." Also, the *Arizona Career College Guide* offers a complete listing of private and public schools for a minimal cost.
- **Newspapers.** Newspapers provide information about the local economy. In addition to the classified ads which provide a comprehensive list of job openings, newspapers document company expansions, openings, and layoffs as well as provide general information about trends and life in the local community. Sunday editions generally provide the most information about job openings.

- **Periodicals.** Various publications can provide information on business trends, job availability, and community information.

Arizona College and Career Guide. This is a comprehensive guide to programs of study offered by public and private postsecondary schools in Arizona. There is a \$5 charge.

Arizona Commission for Postsecondary Education
2020 N. Central Avenue, Suite 275
Phoenix, AZ 85004
(602) 229-2591

Arizona Community Profiles. This document is produced annually by the Arizona Department of Commerce and provides summaries of socioeconomic and demographic information on more than 145 Arizona communities. Individual profiles are available at no charge.

Arizona Department of Commerce
3800 N. Central, 14th Floor
Phoenix, AZ 85012
(602) 280-1321

Arizona Economic Trends. This is a quarterly newsletter covering employment and labor issues affecting Arizona and the nation. One copy of each issue is available at no charge.

Arizona Department of Economic Security
Research Administration, Site Code 733A
P.O. Box 6123
Phoenix, AZ 85005-6123
(602) 542-3871 or (800) 321-0381

Arizona Industrial Directory. This is produced every 2 years by the Phoenix Chamber of Commerce and lists more than 5,000 manufacturers and wholesalers in Arizona. There is a \$60 charge.

Phoenix Chamber of Commerce
34 W. Monroe Street
Phoenix, AZ 85003
(602) 254-5521

Guide to Establishing a Business in Arizona. This publication is available at no charge.

Arizona Department of Commerce
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Major Employers Guide. This 2-part series lists business with 400 or more employees in the Phoenix metropolitan area and 250 or more employees in the Tucson metropolitan area, Flagstaff, and Yuma. One copy of each publication, which provides addresses, telephone numbers, and street location maps, is available at no charge.

Arizona Department of Economic Security
Research Administration, Site Code 733A
P.O. Box 6123
Phoenix, AZ 85005-6123
(602) 542-3871 or (800) 321-0381

Valley Organizations. This is a guide to local business, professional, and civic groups. The publication is available at no charge to subscribers to *The Business Journal* or for a \$10 charge to nonsubscribers.

The Business Journal
2910 N. Central Avenue
Phoenix, AZ 85022
(602) 230-8400

- **Chambers of Commerce.** Local Chambers of Commerce often have lists of businesses as well as other demographic and economic data. The Phoenix metropolitan area has Chamber branches in about 10 cities and is home to the Arizona Chamber of Commerce. Information on local Chambers can be obtained from the Phoenix office.

Arizona Chamber of Commerce
1221 E. Osborn Road
(602) 248-9172

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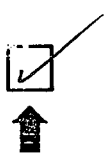
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