This technical assistance guide is designed as a convenient resource manual for Private Industry Councils (PICs) and Service Delivery Area (SDA) staff in implementing the youth employment competencies requirements of the Job Training Partnership Act (JTPA).

The Local Perspective

We have talked to a number of PIC members throughout the country. Most of these business people agree on several important points.

1. They share a common idea of skills youth need to be job-ready. These skills do not differ significantly throughout the country.

2. They want to use their resources for job placement efforts and skill training.

3. They are not interested in hiring staff to design tests, benchmarks, competency indicators, assessment instruments, and standards. Instead, they are happy to use existing programs that can be purchased for a small amount of money and meet most of their needs.

4. They believe in the value of competency-based education, but are not interested in generating a lot of paperwork.

When businesspeople, vocational educators, and SDA staff are shown the competency-based instructional materials, tests and performance checklists that are recommended in this manual, they have said, "This is just what we've been looking for. Now let's get on with our work."

The National Perspective

Conversations with state and national organizations indicate that the current lack of federal leadership and confusion about youth employment competencies will continue for at least another two years. The U.S. Office of Management and Budget wants to axe youth employment competency requirements completely because they are concerned that this is a method to get around hard performance standards based on job placement. However, OMB efforts will probably be limited to keeping competencies off new JTPA reporting forms as a line item.

U.S. Department of Labor officials will probably continue to avoid actions that smack of federal control. The most DOL will probably do is to make some suggestions and pay for more training sessions aimed at convincing state bureaucrats to require standards of substance. (If concrete standards for youth employment competencies are developed, they will probably result from state standards imposed through the carrot of incentive funds.)
Implementation to Date

Not many youth competency programs are up and running. The National Governors' Association staff claim that 150 SDAs may currently be operating some sort of programs including competencies. According to NGA, of those SDAs who are interested in getting involved in competency programs, 75% do so for better positive termination numbers, 15% for a method of marketing their youth's job skills, and 10% to qualify for incentive funds.

The National Association of Private Industry Councils staff have found that most people are using the youth employment competencies primarily for in-school youth and school-to-work transition programs. Some operators, like one in San Diego, refuse to use anything but job placement as a positive termination (even though they have been using a competency-based system for the last five years). NAPIC suggests that the momentum in the country for youth competency standards will insure its own continuation, especially in those areas where it is combined with state incentive monies. They suggest that PICs should move forward on youth competency systems but not spend a lot of money in this effort.

Why Reinvent the Wheel?

All of the national organizations that we spoke with who are paid to provide training to state and local JTPA program operators felt that for political or other reasons they could not endorse exemplary youth employment competency systems already developed. We believe that there are good systems that PICs and SDA staff should consider before they reinvent their own programs. It is from this perspective that we have prepared this technical assistance guide.

--Lois Quinn
John Pawasarat

ACKNOWLEDGMENTS

This federal assistance guide is based on a similar guide (without editorial comment) produced by the Employment & Training Institute staff for the Wisconsin Governor's Employment and Training Office (GETO) as a technical assistance guide for the state of Wisconsin. We acknowledge the assistance of the Wisconsin Youth Employment Competencies Task Force and particularly Patrick Sweeney of the Wisconsin Department of Public Instruction for their work and helpful comments in this area. All editorial comments are our own, and not necessarily shared by these individuals or the GETO staff.
I. PRE-EMPLOYMENT AND WORK MATURITY SKILLS

We think it's helpful to separate these skills into two separate categories.

Pre-employment skills include knowledge about how to find and keep a job (e.g. completing a job application, participating effectively in a job interview), as well as basic survival skills needed to function in society (e.g. using the phone, telling time, renting an apartment, opening a banking account, using public transportation).

Work maturity skills include positive work habits, attitudes and behavior that are necessary to keep a job (e.g. punctuality, regular attendance, presenting a neat appearance, following instructions, completing tasks, accepting criticism, working well with others, assuming responsibility).

A. PRE-EMPLOYMENT SKILLS

<table>
<thead>
<tr>
<th>STEPS FOR IMPLEMENTING A PRE-EMPLOYMENT COMPETENCY SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP #1: Choose the required competencies for the pre-employment area.</td>
</tr>
</tbody>
</table>

Look at the 4 competency systems already developed. If you like one system, go with it. Pick the competencies you think are important. Discard the less important ones. Decide if all youth will be required to meet these competencies for a positive termination.

STEP #2: Determine standards and tests.

Mastery in each competency should be measured by an objective test with a set standard. The Wisconsin Youth Employment Competency Program, for example, requires a score of 80% correct on a 20-question multiple choice test. Where appropriate, a performance checklist or test should also be required (e.g. filling out a job application, taking a job interview).

Each of the four systems recommended have pre-set levels of competence measured by objective tests. If you have staff who are genuinely qualified, modify two or three questions, so you feel the tests provide a good standard and are relevant to your community. Or use them as is. (Do you really think the standards for filling out a job application are different throughout the country?)

A word of caution: Some of your neighbors will use "teacher observation" to determine when students have mastered their competencies. This method can be rigorous if the teacher really watches what each student is doing. Or it can be as meaningless as saying, "It looks like everyone in my class can fill out a job application." or "We measure completion by spending 6 hours
in the classroom." The folks who go this route will have more positive terminations than the PICs and SDAs who require a valid measure of when their youth are job-ready.

The feds don't care which method you use and your state office may not care either. THE CHOICE IS YOURS. Quality or numbers—nothing new here.

STEP #3: Develop curriculum and select teaching materials.

The four systems recommended here come with curriculum and lesson plans for individual and/or group work. Many publishers have good materials to teach the pre-employment competencies.

If an SDA decides to develop its own curriculum—be forewarned. This is an area which requires an experienced teacher who can write curriculum (not all good teachers can) and who know the world of work. We recommend that you modify an existing curriculum rather than start from scratch. Spend your time making sure that you use local materials whenever possible (application forms from local industries, local and regional newspapers, etc.).

STEP #4: Establish assessment and pre-testing procedures.

Pre-testing is expensive and time consuming. It should not be necessary for the pre-employment skills area since all students should be required to complete the PIC-approved competencies. If you are also teaching survival skills, you may want to identify students who can test out of some of the areas.

We suggest that you give a quick-and-dirty reading test like the WRAT (Wide Range Achievement Test published by Jastak Associates, 1526 Gilpin Avenue, Wilmington, Delaware 19806. (302) 652-4990) This test will provide the instructor with an assessment of the approximate reading level of each student so that he or she can gear instructional materials and help accordingly.

BACKGROUND

The ultimate purpose of the pre-employment competency approach is to help youth gain the knowledge they will need to find and keep a job. Too often, youth begin looking for work with no clear idea of what employers expect of them or how to organize a job search. Secondarily, PICs may choose to identify competencies which youth need to survive in the adult world.

In the 1970s the University of Texas conducted an extensive 4-year study of competencies needed by adults to function in our society. Instead of focusing on academic grade level equivalents, the Adult Performance Level (APL) Project defined knowledge areas required for successful everyday living. These APL competencies have been used by a wide variety of institutions and a score of commercial publishers in preparing competency-based educational
materials. The result? Many people have already thought about the skills people need in order to find and keep a job and to survive in our society. Many publishers have student textbooks, workbooks, and audio-visual materials to teach these competencies. DON'T REINVENT THE WHEEL. USE IT OR IMPROVE IT.

You ought to consider at least one of four instructional systems for identifying and teaching pre-employment competencies. Each of the four systems is based on the APL research.

1. **Youth Employment Competencies Program of the Wisconsin Department of Public Instruction and University of Wisconsin Employment & Training Institute.**

   This curriculum and set of competency tests were developed originally for juvenile offenders in the Wisconsin correctional facilities. The curriculum is in the same format and areas specified by the Job Training Partnership Act (JTPA). The competencies have been adopted by the Wisconsin Job Training Coordinating Council for the state's JTPA system.

   The Wisconsin program relies most heavily on materials developed by the Clovis, California Adult School. The Clovis Adult School's competency-based program was funded as an exemplary program of the U.S. Department of Education's National Diffusion Network. The Clovis materials are available commercially through Pitman Learning, Inc., 19 Davis Drive, Belmont, CA 94002, (415)-592-7810. Core materials in the Wisconsin Program are geared to students with poor reading skills. Additional student workbooks are recommended for higher level readers.

   The Wisconsin Youth Competency Program identifies 7 competencies in the pre-employment area:

   1. Identify resources and procedures for seeking a job.
   2. Complete a job application form.
   3. Participate effectively in a job interview.
   4. Identify proper work habits, attitudes and behavior.
   5. Describe standard benefits and payroll structure.
   6. Develop a personal career plan.
   7. Use labor market information to find jobs.

   The program also identifies 32 survival skill competencies in consumer economics, community resources, government and law, health, and interpersonal relationships. Curriculum materials, suggested classroom and student activities, and competency tests and performance checklists are provided for each skill area.

   Advantages of the program: The program is cheap ($15 for the Job Skills Curriculum and Tests, which can be reproduced as much as you like). It is easy to use and designed for low-level readers. The tests are not easy, but should insure that youth are prepared for the job market. The program is available from the Employment and Training Institute, University of Wisconsin, P.O. Box 413, Milwaukee, WI 53201. Contact Lois Quinn or John Pawasarat (414) 968-6567.
JOBSKILLS
LEARNING OBJECTIVE:

Identify the necessary steps in getting ready for a job interview.

CLASSROOM ACTIVITIES
1. Discuss student readings and worksheets.
2. Write on the chalkboard questions students might be asked at a job interview. Have each student write their answers to these questions on a sheet of paper. As a class (or privately, when appropriate) discuss the possible responses.
3. After discussing proper dress for job interviews, ask students to come to class dressed for an interview.
4. Get students together in groups of two. Ask one student to apply for a job and the other student to play the boss asking interview questions (from Job Interview, Follett, pp. 45-50 or a similar list). Discuss the experience. Have students change roles and repeat.

STUDENT READINGS AND WORKSHEETS
1. Job Interview, LIFE SCHOOL, Handouts 84-5, 6 or 7, 8-9.

SUPPLEMENTARY MATERIALS

SAMPLE LESSON PLAN
from the Wisconsin Youth Employment Competency Program Job Skills Book.

JOBSKILLS
"Demonstrate the Ability to Participate Effectively in a Job Interview"

Test Form A

DIRECTIONS: DO NOT WRITE ON THIS TEST! If you need scrap paper, ask your instructor for a blank piece of paper.

The purpose of this test is to determine if you can demonstrate the ability to participate effectively in a job interview.

Read each question. Then read all four of the choices listed. Select the ONE choice which best answers the questions or completes the sentence. Mark this choice on the answer sheet provided by your instructor. To pass this exam you must correctly answer at least 16 out of 20 (80%) items.

1. The job interview takes place between you and the
   A. person in charge of hiring.
   B. sales manager.
   C. company president.
   D. person who had the job last.

2. In an interview it is important to
   A. may as little as possible about past jobs.
   B. act any way you want because the interview doesn't matter.
   C. ask questions about the job you want.
   D. answer only questions which make you look good.

3. In job interviews employers may ask questions about
   A. past jobs.
   B. personal interests.
   C. education.
   D. all of the above
JOB SKILLS
"Participate Effectively in a Job Interview"

PERFORMANCE TEST

Student ___________________________ Date of Evaluation ___________________________
Instructor ___________________________ Performance Attempt 1 2 3 4

DIRECTIONS: The purpose of this performance test is to determine if you are able to participate effectively in a job interview. To master this competency, you must demonstrate proficiency in 8 out of 10 points (80%) on the performance checklist. All critical items (*) must be marked "yes" for mastery.

You will be interviewed for a job. (The interview will be conducted by a person responsible for hiring in a business or government agency.)

You Skills
"Participate Effectively in a Job Interview"

PERFORMANCE TEST CHECKLIST

<table>
<thead>
<tr>
<th>Critical Items</th>
<th>Points to Be Observed</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate proper dress and grooming.</td>
<td>*1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2. Give your resume to the interviewer.</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3. Explain why you want the job.</td>
<td>*1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4. Explain why you are suited for the job.</td>
<td>*1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5. Explain your career goals.</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6. Describe your educational background.</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7. Demonstrate good eye contact.</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8. Use firm, pleasant tone of voice.</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9. Control hands, legs and facial movements.</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>10. Answer questions truthfully and directly.</td>
<td>*1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Total Points Possible = 10

Points Needed for Mastery = 8

PERFORMANCE SCORE TOTAL

SAMPLE PERFORMANCE CHECKLIST

from the Wisconsin Youth Employment Competency Program Job Skills Book.
2. Competency Achievement Packets (CAPs) of the Los Angeles Unified School District Division of Career and Continuing Education.

The National Diffusion Network also supported work by the Los Angeles Unified School District to develop competency-based APL curriculum materials for higher level readers.

The CAPs program identifies 7 competencies in the pre-employment area:

1. Know of and be able to use private and public sources of employment information.
2. Evaluate your interests, abilities, goals, and values, and relate them to career requirements.
3. Understand how to complete job application forms, prepare a resume, and write a letter of application.
4. Understand effective employment interview behavior.
5. Understand the interpersonal skills needed to interact effectively on the job.
7. Understand the meaning of "equal opportunity" in relation to hiring practices and your rights as a worker.

CAPs are available for 38 survival skills (again based on the APL model). For each competency, TA provides a learner's manual, which can be used for individual instruction. STUDENTS MUST HAVE AN 8TH GRADE READING LEVEL TO HANDLE THE MATERIALS. An instructor's folder includes activities which should be done with a teacher and mastery tests for each learning objective.

Advantages: The CAPs materials are homemade, but well-written. They use an easy-to-follow commonsense approach. They should work well with the better reader who is self-motivated. Again, the tests are challenging—which is necessary if students are really going to be job-ready.

The materials are available for the costs of duplication from the Employment & Training Institute at the University of Wisconsin-Milwaukee. They can be reproduced as long as credit is given to the Los Angeles Unified School District.
3. **Job Corps World of Work Program**

The Employment and Training Administration of the U.S. Department of Labor contracted with TEAM Associates to prepare a competency-based program for Job Corps participants. The World of Work Program was designed to provide training in the skills, behaviors, and attitudes necessary to find and keep a job and to survive as responsible working adults.

<table>
<thead>
<tr>
<th>Six competencies are identified for the Job Corps World of Work:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify sources of information on job opportunities and use the information to locate job openings.</td>
</tr>
<tr>
<td>2. Identify the advantages and disadvantages of each of these sources.</td>
</tr>
<tr>
<td>3. Interpret the special vocabulary and abbreviations used in classified ads.</td>
</tr>
<tr>
<td>4. Fill out job application forms and demonstrate interview skills.</td>
</tr>
<tr>
<td>5. Identify the attitudes and behaviors that make a good employee.</td>
</tr>
<tr>
<td>6. Explain the legal and financial aspects of employment (deductions, taxes, minimum wage, etc.).</td>
</tr>
</tbody>
</table>

Six additional competencies are delineated to improve employability (e.g. telling time, making change) and plan and manage a family economy.

The program is self-instructional, self-paced and individualized. It recommends commercially available audio-visual materials and student textbooks and workbooks. Competency tests are provided for each area.


The Remediation and Training Institute developed a competency-based instructional program based on the Job Corps model.

Four competencies are identified in the occupational knowledge area:

1. Career choices: Define basic occupational options, the primary characteristics of jobs in those occupations, and the requirements for career entry and advancement. Relate aptitudes and interests to career choices. Describe the role of vocational tests and counseling.

2. Job Search: Name the different resources available for assistance in finding jobs. List the advantages and disadvantages of each. Read and interpret employment advertisements.

3. Job Getting: Describe how to apply for a job, complete job application forms and construct a resume. Demonstrate interviewing skills.

4. Job Holding: Define the legal and financial aspects of employment. Explain behaviors and attitudes appropriate for job holding and advancement.

The Comprehensive Competencies Program also provides curriculum for APL competencies in consumer economics, government and law, health and community resources. Tests developed by the University of Texas are used as a final measure of competence in these areas.

The program provides curriculum guides, lesson plans, competency tests, instructional materials and computer software (but not hardware) for instruction, record keeping and test scoring.

The program is designed to be used for students on three reading levels.

The system is sold only as part of a package. The cost--$10,000. Contact the Remediation and Training Institute, 206 King Street, Alexandria, VA 22314, (703) 836-7030.
B. WORK MATURITY SKILLS

A 1983 study for the U.S. Department of Labor by the University of California found that a majority of employers regard good work habits and positive attitudes as crucial to an employee's success on the job. These attributes are typically defined as "following the rules and working hard."

Under JTPA Private Industry Councils are asked to specify the work maturity skills they believe are important and to adopt specific standards (benchmarks) to measure when they are demonstrated. (Many JTPA sub-contractors have already used employer checklists under the CETA program.) While some of the pre-employment skills require knowledge of acceptable on-the-job behavior, work maturity skills must be demonstrated.

STEP #1: Choose the work maturity competencies.

Attached is an example of a work maturity competency checklist used by the South Florida Employment and Training Consortium. It's the best we've seen. The checklist requires work maturity competence in 9 areas: attendance, punctuality, grooming/hygiene, following directions, quality of work, work quantity, dependability, working relationships, and personal behavior.

If you want to shop around for other work maturity checklists, you might call the Rock Island Tri-County Consortium, 1504 Third Avenue, Rock Island, IL 61201, (309) 792-1329, or the Fulton County Employment & Training, Southern Alleghenies Commission, Southern Alleghenies Plaza, Suite 100, 1506 Eleventh Avenue, Altoona, PA 16601.

STEP #2: Determine tests and standards.

Work maturity skills are measured by a performance checklist completed by the youth's supervisor on the job. The PIC should adopt a measurable standard for each skill which can be understood by the youth and the supervisor. The South Florida Consortium, for example, requires that "attendance" requires that a youth have no more than 3 unexcused absences from work over a 6-week period. Excused absences are defined.

STEP #3: Determine who will be required to complete these competencies.

The PIC should set standards for work experiences for which the SDA will certify competence in work maturity. Consideration should be given to the time needed for a youth to demonstrate adequate work maturity skills. The Michigan Department of Labor, for example, recommends that a summer work program of 30 hours per week for at least eight weeks may be adequate. An equivalent period of part time work of at least 240 hours in total would also suffice.
WORK MATURETY
(WORK EXPERIENCE) BENCHMARKS

SUBJECT
SUPERVISOR

SUBJECT
SUPERVISOR

RATING OF WORK MATURETY SKILLS (circle rating—each factor)

1. Attendance
2. Punctuality
3. Grooming/Hygiene
4. Following Directions
5. Quality of Work
6. Work Quantity
7. Dependability
8. Working Relationships
9. Personal Behavior

Benchmark
1. Attendance
2. Punctuality
3. Grooming/Hygiene
4. Following Directions
5. Quality of Work
6. Work Quantity
7. Dependability
8. Working Relationships
9. Personal Behavior

Given an eight week work period, the participant will have no more than three excused absences during the final six weeks, unless extenuating circumstances were present and are documented.

Given an eight week work period, the participant will not exceed a total of five minutes late in each five day work period for the last six week period. In addition, the participant will demonstrate the procedures for notifying supervisors if they are going to be late.

Given an eight week work period, the participant will demonstrate good grooming and hygiene and the ability to dress according to the job to be performed, to the supervisor's satisfaction, as documented in final evaluation form completed by the supervisor.

Given oral instructions for a work assignment, the participant will complete the assignment as instructed and within the timeframe specified if a time limit was given, to the supervisor's satisfaction.

Given work assignments, the participant will accurately complete the assignments to the supervisor's satisfaction, as documented in final evaluation form completed by the supervisor.

Given work assignments and instructions, the participant will complete all tasks in accord with the instructions provided, as documented in final evaluation form completed by the supervisor.

Given work assignments, the participant will demonstrate that he/she can follow directions, complete work on time, as specified, without close supervision, to the supervisor's satisfaction, as documented in final evaluation form completed by the supervisor.

Given work assignments which require giving or receiving assistance, the participant will demonstrate ability to work with co-workers, to the supervisor's satisfaction, as documented in final evaluation form completed by the supervisor.

Given an eight week work period, the participant will demonstrate acceptable behavior, to the supervisor's satisfaction, as documented in a final checklist completed by the supervisor.

Objective information for attendance and punctuality is collected. In addition, a youth must be rated "3" or better for all nine categories on the accompanying form to be certified as competent.

SAMPLE OF WORK MATURETY SKILLS CHECKLIST FROM SOUTH FLORIDA EMPLOYMENT AND TRAINING CONSORTIUM
II. BASIC SKILL COMPETENCIES

Basic skills are the essential reading, writing, math, speaking and listening competencies needed to secure and maintain employment. Most PICs will choose not to teach basic skills or will punt this area to the public schools. Others will contract with existing alternative schools for GED or traditional adult basic education courses in reading, writing and math.

Two competency-based approaches can be used by PICs who wish to teach basic skills:

1. Adopt a list of minimum basic skills necessary for all occupations.
2. Identify and teach basic skills needed for a specific occupation.

### STEPS FOR IMPLEMENTING BASIC SKILL APPROACH #1

**STEP #1:** Select and/or adopt reading, writing and math competencies required for students.

The basic skills listed on the next page consist of 12 reading, 9 writing and 30 math competencies. They are intended to be the basic minimum skills necessary for students entering the world of work. The PIC should adopt the entire list or select those competencies they believe are essential and attainable for their youth.

**STEP #2:** Determine standards and tests.

The Wisconsin Youth Employment Competencies Program has developed two 20-question multiple choice tests for each competency. Students must answer 80% of the questions correctly for competence. Performance tests are also required for six of the writing competencies. PICs may adopt these tests as is or modify them so that test examples are based on local community materials.

**STEP #3:** Develop a curriculum and select teaching resources

The Maryland State Department of Education has published instructional guides which suggest student and classroom activities, vocabulary terms, and suggested classroom evaluation techniques for each learning objective identified above. These instructional guides are available from the Maryland Department of Education for $4 each. Contact the State Media Services Center, 200 West Baltimore Street, Baltimore, MD 21201, (301) 659-2102.

Several publishers have excellent student textbooks, workbooks and audio-visual materials for competency-based instruction in reading, writing, and math, including Educational Design, Inc., Scholastic, Inc., New Readers Press, and Laidlaw Brothers. We recommend that experienced teachers be employed to develop any new curriculum in the basic skills area.
BACKGROUND

In Wisconsin the Job Training Coordinating Council recommended a list of 12 reading, 9 writing and 30 math competencies from which the PICs could choose those necessary for students entering the world of work. The competencies are from the Wisconsin Youth Employment Competency Program. They include:

READING
- Interpret Signs & Labels
- Follow Directions in Sequential Order
- Use a Road and Street Map
- Use a Dictionary
- Use a Library
- Gain Information from Newspapers and Magazines
- Use the Phone Book as an Information Source
- Read and Write Day, Months and Time of Day
- Use a Textbook and Reference Materials
- Read Consumer Information
- Interpret Information for the World of Work
- Interpret Forms

WRITING
- Record Personal Information for Self and Others
- Write Messages and Reports
- Write Resume and Personal Information Sheet
- Write Letter
- Complete Forms
- Write Sentences
- Write Paragraphs
- Write Compositions
- Identify Study Skills and Test Taking Skills

MATH
- Identify Whole Numbers
- Add Whole Numbers
- Subtract Whole Numbers
- Multiply Whole Numbers
- Divide Whole Numbers
- Solve Word Problems Using Whole Numbers
- Identify Fractions and Equivalent Fractions
- Add Fractions
- Subtract Fractions
- Multiply Fractions
- Divide Fractions
- Solve Word Problems Involving Fractions
- Identify Amounts of Money
- Identify Decimals
- Add Decimals
- Subtract Decimals
- Multiply Decimals
- Divide Decimals
- Convert Decimals to Fractions
- Solve Word Problems Involving Decimals
- Compare Fractions, Decimals, Percent
- Calculate Percent of a Number
- Calculate the Rate
- Calculate the Principal
- Solve Word Problems With Percents
- Read Graduated Scales
- Solve Problems Using Linear Measurement
- Use Electronic Calculator
- Solve Problems Using Area
- Solve Problems Using Volume

The Youth Employment Competency Program in reading and writing is based on Project Basic, Maryland's competency program. Beginning in 1972 the state Department of Education and local elementary and secondary school systems developed a total instructional program consisting of competency-inclusive curricula, appropriate instruction and assessment. The program includes 74 learning objectives in functional reading and 39 objectives in functional writing. Since 1982 all students graduating from public schools in the state are required to pass competency tests in these areas. Our math curriculum uses a standard basic skills approach followed by numerous textbook publishers.
BASIC SKILL APPROACH #2: Identify and teach basic skills needed for a specific occupation.

Much has been written about identifying specific reading, writing, math, speaking and listening skills needed for specific entry level jobs. Two efforts in this area are sufficiently advanced to be useful to SDCs who wish to explore this approach.

1. Capital Area Career Center Modules

The Capital Area Career Center (CACC) has developed a matrix which identifies which of 174 math skills (from addition of whole numbers to basic algebra and geometry) are required for entry level jobs in 34 occupations. Modules (individualized student learning packets with competency tests) are available for each math skill. Comparable materials are not available for reading and writing. Contact the CACC Dissemination Project, Ingham Intermediate School District, 611 Hagadorn Road, Mason, MI 48854, (517) 676-1050.

### SAMPLE MATRIX OF SKILLS NEEDED FOR ENTRY-LEVEL OCCUPATIONS

<table>
<thead>
<tr>
<th>UNIT 11 ROUND OFF WHOLE NUMBERS</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>ART 11.100 Round Off Whole Numbers to the Nearest Tens</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>ART 11.200 Round Off Whole Numbers to Hundreds, Thousands, Ten Thousands or Millions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
</tr>
<tr>
<td>ART 11.201 Arrange Invoices In Order by Number</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>UNIT 12 ADDITION OF WHOLE NUMBERS</th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 12.100 Addition of Whole Numbers</td>
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<td>X</td>
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<td>X</td>
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<tr>
<td>ART 12.102 Find Total Mileage</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>ART 12.103 Add Voltage, Current and Wattage</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>ART 12.104 Making Change</td>
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<td>X</td>
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<td>ART 12.120 Checking Addition of Whole Numbers</td>
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<td>ART 13.200 Subtract and Borrow</td>
<td>X</td>
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<td>X</td>
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<td>ART 13.201 Find Total Mileage for a Job</td>
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<td>ART 13.202 Find the Time Spent to do a Job</td>
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<td>ART 13.203 Find Missing Measurements</td>
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<td>ART 13.220 Checking Subtraction of Whole Numbers</td>
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<td>ART 14.101 Find Number of Volts</td>
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<td>X</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>ART 14.102 Find the Amount of Stock Needed to Make More Than One Piece of the Same Length</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<th>UNIT 21 DIVISION OF WHOLE NUMBERS</th>
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<td>ART 21.100 Divide Whole Numbers Without a Remainder</td>
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<td>ART 21.120 Check Multiplication of Two Numbers</td>
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<td>ART 21.200 Divide Whole Numbers with a Remainder</td>
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<td>X</td>
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<td>ART 21.201 Change Minutes to Hours</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>ART 21.204 Find Number of Pieces You Can Cut from a Longer Size Stock</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</table>
2. **U.S. Department of Labor**

   The U.S. Department of Labor developed a system to identify the basic skills required for every occupation listed in the Dictionary of Occupational Titles. While the system is old (1971), and updated only in 1977, it remains an accurate measure, according to Michigan who is currently using it. Contact, Weldon Burden, Michigan Department of Labor, Box 30015, Lansing, MI 48909, (517) 322-1788.

   Several publications provide useful background on identifying job-related basic skills (although they will leave you a long way from development of a curriculum and competency tests).


2. *Linking Basic Skills to Occupational Task & Vocational Training, 1982.* Salt Lake Skills Center, Utah Technical College, 431 South 600 East, Salt Lake City, UT 84102, (801) 531-9310. Documents are prepared for entry-level clerk-typist and entry-level welder.


   A number of PICs are using approaches in teaching basic skills that are not competency based. Most common goals are raising a student's reading level by 2 grades or requiring one grade level increase for every 90 hours of instruction. While youth may benefit from any instruction in basic skills, these approaches do not identify or target specific basic skills that are required by employers for hiring or job retention.

   Many PICs substitute passage of the GED high school equivalency exam for instruction in basic skills. The GED or high school diploma may be a necessary pre-requisite for successful entry into the labor force but it is no measure of competence or readiness for work. Students who pass the GED with the lowest scores possible will be performing at reading and math levels that are too low for many jobs.
III. JOB SPECIFIC SKILLS

Job specific skills are the knowledge and skills normally required to carry out entry-level tasks of a specific occupation or cluster of occupations.

Surveys of employers have found that most businesses and industries want entry-level workers who are literate and trainable, preferring to do most of the skill training themselves. Employers who consider technical skills essential to entry and success in jobs frequently require two or more years of specific vocational preparation.

A. On-the-Job-Training

One simple and effective method of providing job-specific skill training on the job is being operated at the Midland Park School, a juvenile corrections facility in Iowa. The job coordinator at the Midland Park School sets up vocational programs with local businesses and industries in vocational education areas not available at the corrections school.

The job coordinator and local business proprietor or manager set up individual competency-based curriculum outlines for each offgrounds training site. For each skill the work supervisor notes the date the student completed the competency. The supervisor determines 1) if the student can perform the task without assistance or with assistance, and 2) if the level at which the student performs the task is acceptable in competitive employment or is not acceptable in competitive employment. When a student successfully completes the training program, the student is awarded a competency certificate for the particular training area and a letter of recommendation.

This format encourages accountability. Instructors can use the format to trace their progress in providing training. Coordinators can use the format for evaluating progress and justifying extended training or changing the student's training field. THIS FORMAT IS USEFUL FOR ON-THE-JOB PLACEMENTS EVEN WHEN NOT REQUIRED BY THE PIC FOR A POSITIVE TERMINATION. For more information, contact Sherry Caldwell, Job Coordinator, Midland Park School, Eldora, IA 50627, (515) 858-5402.

B. Classroom Training Programs

Successful job specific competency programs implemented by technical schools usually take at least two years to develop and involve full-time staff working with employer advisory councils. Actual classroom instruction requires an outlay of equipment and, of course, teachers experienced in the occupational field and trained to provide competency-based instruction. Most PICs will appropriately view such efforts as beyond their abilities or resources.
Among the best competency-based technical school programs, worth a visit if you are considering pursuing this area, are:

1. 916 Vo-Tech Institute, 3300 Century Avenue North, White Bear Lake, MN 55110, (612) 770-2351.

2. Humphrey Occupational Resource Center, 75 Dudley Street, Boston, MA 02119, (617) 442-5200.


4. Stephenson Area Career Center, Pearl City Road, Freeport, IL 61032, (815) 235-8025.

An excellent quarterly publication, Open Entries, provides information and an exchange of competency-based learning materials, including new guides, packets, audiovisual materials and computer-based resources available around the country. It is available for $5 a year from The Center for Studies in Vocational Education, Florida State University, Stone Building, Tallahassee, FL 32306, (904) 644-2440.

Where job specific skill training is desired and affordable, it should probably be done on a contract basis with technical schools who have already developed curriculum and competency measures, validated by employer groups. Training in job specific skills can be an expensive undertaking. There is no requirement that all youth receive job-specific skill training.

### SAMPLE OF MIDLAND PARK SCHOOL EMPLOYER CHECKLIST FOR JOB SPECIFIC SKILLS AND AUTOMOTIVE SERVICING

<table>
<thead>
<tr>
<th></th>
<th>Completed</th>
<th>Date of Completion</th>
<th>Degree of Independence Without Assistance</th>
<th>With Assistance</th>
<th>Acceptability in competitive employment</th>
<th>Acceptable</th>
<th>Not Acceptable</th>
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<tbody>
<tr>
<td>5. Undercoating &amp; rustproofing</td>
<td></td>
<td></td>
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<tr>
<td>6. Fabric care</td>
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<td></td>
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<td>7. Mud flaps</td>
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<tr>
<td>8. Radio installation</td>
<td></td>
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<tr>
<td>9. Running boards</td>
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<tr>
<td>10. Trailer equipment</td>
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<tr>
<td>11. Pick-up bumpers &amp; hitches</td>
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<td>3. Fuel pump</td>
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<td>4. Water pump</td>
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<td>5. Air-conditioning service</td>
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