The materials, visuals to accompany a presentation on development of workplace literacy programs, include: a definition of workplace literacy; flow chart for basic skills program development; definition of workplace education needs assessment; list of topics for interviewing trainers, supervisors, management personnel/HR, safety, union/labor representatives and worker, in developing a workplace literacy program; checklist of materials to collect in organizing program content; notes on the readability of written materials; form for analyzing job tasks in terms of basic skills needed, core literacy skills, and related terms, materials, and situations; list of program marketing and recruitment activities; comparison of advantages of mandatory and voluntary worker literacy assessment, and of company-wide assessment versus assessment based in department or shift; notes on use of standardized versus customized assessment instrument; list of tests available to assess ESL, reading/writing, and math skills; excerpt from an assessment report; definitions of competency (general) and a competency (specific); list of characteristics of a customized curriculum; list of competencies and syllabus for a high-beginner-level ESL course for production workers; characteristics of a quality workplace instructor; and chart outlining purpose and data-gathering methods for four levels of program-based evaluation (reaction, learning, transfer of learning, organizational impact). (MSE) (Adjunct ERIC Clearinghouse on Literacy Education)
WORKPLACE BASIC SKILLS
from
BEGINNING TO END

Overview
Needs Analysis
Marketing/Recruitment
Workforce Assessment
Curriculum
Instruction
Evaluation

Presenters:
Douglas Jones
Tess Locsin
Linda Mrowicki
Colette Poindexter
Laima Schnell

Workplace Education Division of
THE CENTER - RESOURCES FOR EDUCATION
1855 Mt. Prospect Road
Des Plaines, IL 60018
(708) 803-3535

Note: This packet contains copies of the overheads from the presentation with
the exception of those overheads which are from copyrighted materials or materials which
contain company-specific information.
ILLINOIS DEFINITION of BASIC SKILLS

"Workplace literacy" refers to the reading, writing, math, and oral communications skills needed to efficiently and competently perform required job tasks.

Workplace literacy is NOT:

- life skills
- job skills / vocational training
- computer literacy
BASIC SKILLS PROGRAM MODEL

Conduct needs analysis

Market program/recruit workers

Assess and counsel workers

Design & develop customized curriculum

Provide instruction

Measure reaction, learning, transfer, impact

EVALUATE & PROVIDE FEEDBACK

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NEEDS ANALYSIS:

An investigation that leads to definitions of jobs in terms of their current and future basic skill requirements and identification of potential problems caused by a lack of these basic skills in the workforce. The tools of a needs analysis are observation, collection and analysis of written materials, and interviews*

A needs analysis:

1) IS...a process and IS... custom-designed

2) INVOLVES... the company, labor, and the educational provider

3) INCLUDES... interviews, written materials, and job-task analysis

Colette Poindexter, Workplace Education Division of THE CENTER - RESOURCES FOR EDUCATION (708) 803-3535
<table>
<thead>
<tr>
<th>Position</th>
<th>General Topics Related to Basic Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>• Company mission</td>
</tr>
<tr>
<td></td>
<td>• Short and long-term goals</td>
</tr>
<tr>
<td></td>
<td>• Role of training</td>
</tr>
<tr>
<td>Trainer</td>
<td>• Types of training programs</td>
</tr>
<tr>
<td></td>
<td>• Success/failure of training</td>
</tr>
<tr>
<td></td>
<td>• Training policies</td>
</tr>
<tr>
<td></td>
<td>• Assumptions about learners’ skills and levels</td>
</tr>
<tr>
<td>Plant Manager</td>
<td>• Areas/departments of greatest need</td>
</tr>
<tr>
<td></td>
<td>• Short-term and long-term priorities</td>
</tr>
<tr>
<td></td>
<td>• Scheduling issues</td>
</tr>
<tr>
<td></td>
<td>• Areas to measure program impact</td>
</tr>
<tr>
<td>Personnel/HR</td>
<td>• Demographic data on current workforce</td>
</tr>
<tr>
<td></td>
<td>• Profile of applicants</td>
</tr>
<tr>
<td></td>
<td>• Hiring criteria</td>
</tr>
<tr>
<td></td>
<td>• Employee testing</td>
</tr>
<tr>
<td></td>
<td>• Layoff/Firing policies</td>
</tr>
<tr>
<td></td>
<td>• Grievances/Complaint Resolution</td>
</tr>
<tr>
<td></td>
<td>• Personnel issues - insurance, etc.</td>
</tr>
<tr>
<td></td>
<td>• Further education opportunities</td>
</tr>
<tr>
<td></td>
<td>• Career/Advancement opportunities</td>
</tr>
<tr>
<td>Quality Technician/Manager</td>
<td>• Types of data collected</td>
</tr>
<tr>
<td></td>
<td>• Problems in quality</td>
</tr>
<tr>
<td></td>
<td>• Data collection problems due to a lack of basic skills</td>
</tr>
<tr>
<td></td>
<td>• Training priorities and concerns</td>
</tr>
<tr>
<td>Safety</td>
<td>• Numbers &amp; types of accidents/injuries</td>
</tr>
<tr>
<td></td>
<td>• Safety related training, meetings, reports, etc.</td>
</tr>
<tr>
<td></td>
<td>• Possible accidents caused by a lack of basic skills</td>
</tr>
<tr>
<td>Union/Labor Representative</td>
<td>• Training policies and priorities</td>
</tr>
<tr>
<td></td>
<td>• Workers' concerns and issues</td>
</tr>
<tr>
<td></td>
<td>• Role of the union</td>
</tr>
<tr>
<td></td>
<td>• Union materials</td>
</tr>
<tr>
<td>Supervisor</td>
<td>• Basic skill needs</td>
</tr>
<tr>
<td></td>
<td>• Possible problems caused by a lack of basic skills</td>
</tr>
<tr>
<td></td>
<td>• Training issues</td>
</tr>
<tr>
<td></td>
<td>• Promotion possibilities</td>
</tr>
<tr>
<td></td>
<td>• Scheduling and other factors which may affect training</td>
</tr>
<tr>
<td>Worker</td>
<td>• Job tasks &amp; responsibilities</td>
</tr>
<tr>
<td></td>
<td>• Training</td>
</tr>
<tr>
<td></td>
<td>• Problem areas</td>
</tr>
<tr>
<td></td>
<td>• Basic skills needed</td>
</tr>
</tbody>
</table>
## MATERIALS TO COLLECT

*Check off the following materials as you collect them. Attach them to this report.*

### BACKGROUND INFORMATION ON THE COMPANY:
- [ ] Company mission statement
- [ ] Company brochure / catalog
- [ ] Organizational chart
- [ ] Job descriptions
- [ ] Quality plan

### WORKPLACE MATERIALS:
- [ ] charts / tables
- [ ] diagrams
- [ ] job aids
- [ ] labels

### FORMS:
- [ ] accident/injury
- [ ] insurance
- [ ] job bid
- [ ] production
- [ ] request for leave
- [ ] scrap card
- [ ] suggestion
- [ ] supply request
- [ ] W-2
- [ ] Other

### MANUALS:
- [ ] accident manuals
- [ ] procedures manuals
- [ ] quality manuals
- [ ] maps, floor plans
- [ ] meeting notes
- [ ] memos
- [ ] move tickets/pick tickets
- [ ] newsletters
- [ ] packing lists
- [ ] paychecks / stubs
- [ ] performance evaluation reports
- [ ] product specifications
- [ ] purchase orders
- [ ] reference materials
- [ ] requisition forms
- [ ] signs (safety/location)
- [ ] schedules

### GRAPHS:
- [ ] bar graphs
- [ ] histograms
- [ ] line graphs
- [ ] Other
- [ ] invoices
READABILITY ANALYSIS

Definition: The grade level at which a narrative piece of writing is written. The level is generally determined by analyzing the number of syllables and the average length of the sentences in the document.

Example:

LOCKOUT PROCEDURE INVOLVING MORE THAN ONE PERSON

In the preceding steps, if more than one individual is required to lockout and tagout equipment, each shall place his/her own personal lockout device and tagout device on the energy isolating device(s). When an energy isolating device cannot accept multiple locks or tags, a multiple lockout and tagout device (hasp) may be used. If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his/her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his/her lock from the box or cabinet.

Analysis:
Job TASK/BASIC SKILLS ANALYSIS FORM

Job: **Coining, Welds**

Job Tasks: 1. Reads Instruction Card. 2. Reads tag on stack of wires received from welder and matches job number. 3. Measures thickness of wire with micrometer and matches to thickness noted on Instruction Card. 4. Puts about 50 wires in front of her. 5. Brushes grease on weld. 6. Places wire on 2 grooves of the die, centering the weld. 7. Presses pedal 4 times, which stamps die. Turns wire so hits all surfaces. 8. Picks wire up in left hand, checking by feel for smoothness of coin. 9. Repeats above until stack of wires is completed. 10. Bands together groups of 50 wires and writes her clock number and welder’s clock number on a tag. 11. Cleans die 2 times per hour. 12. Verbally reports to supervisor the number of wires coined.

<table>
<thead>
<tr>
<th>Job Task Number</th>
<th>Basic Skill Competency</th>
<th>Core Literacy Skills</th>
<th>Co-Specific Terms, Materials, Situations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Read a basic list of instructions</td>
<td>Read for literal comprehension</td>
<td>Instruction Card</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Read technical words and non-technical</td>
<td>Hand written directions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>words</td>
<td>Weld</td>
</tr>
<tr>
<td>2</td>
<td>Read a label</td>
<td>Scan for information</td>
<td>Range of thickness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Match alpha-numeric code</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Measure in metric system</td>
<td>Read up to three place decimals</td>
<td>Instruction card Tag 6W-576</td>
</tr>
<tr>
<td></td>
<td>Read a basic list of instructions</td>
<td>Scan for information</td>
<td>Micrometer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Match numbers</td>
<td>Instruction Card</td>
</tr>
<tr>
<td>10</td>
<td>Calculate number of parts produced</td>
<td>Count</td>
<td>Coin welded wires - 50</td>
</tr>
<tr>
<td></td>
<td>Fill out a simple form</td>
<td>Write numbers</td>
<td>Tag Clock number - 5743</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Copy numbers</td>
<td></td>
</tr>
</tbody>
</table>

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MARKETING / RECRUITING

Initial Activities / Orientation

- Must be planned by the company AND the educational provider

- Must be implemented by both of them

- Content -
  
  goals of the program in order to inform the workers
  
  provide an outline of upcoming activities
  
  state responsibilities of all parties involved
  
  reassure positive benefits

Ongoing Activities

- Counseling after pre-assessment
- Task analysis
- Peer recruitment
- During classroom activities
- Supervisory involvement
- Flyers and announcements
- Use of native language
WHO WILL BE ASSESSED?

MANDATORY OR VOLUNTARY

MANDATORY:
+ Provides results for entire workforce
- Presents issues of what to do if worker refuses

VOLUNTARY:
+ Saves time and money
- Provides results only for subset of workforce

VOLUNTARY BUT STRONGLY ENCOURAGED
+ Most workers will participate
- Those who most need training may refuse

Laima M Schnell, Workplace Education Division of
THE CENTER-RESOURCES FOR EDUCATION (708) 803-3535
WHO WILL BE ASSESSED?

COMPANY-WIDE OR LIMITED TO DEPT. OR SHIFT

COMPANY-WIDE

+ Involves everyone

- May result in considerable time lag before training of some workers

LIMITED TO DEPT. OR SHIFT

+ Focusing on high priority group keeps down costs

- Singling out one dept. may have detrimental results
WHAT ASSESSMENT INSTRUMENT?

STANDARDIZED OR CUSTOMIZED

**STANDARDIZED**

+ Easy to obtain and grade
+ Valid and reliable
- Content is general, not work-related

**CUSTOMIZED:**

+ Content is job-specific
- Time-consuming to develop and grade

**COMBINATION STANDARDIZED AND CUSTOMIZED:**

Best of both worlds
ASSESSMENTS FOR ESL:

- Basic Inventory of Natural Language (BINL)
- Foreign Service Institute (FSI)

Others: BEST, ESLOA, HELP, TEPL

ASSESSMENTS FOR READING/WRITING:

- Test of Adult Basic Education (TABE)

Others: BEST, CELSA, HELP TEPL

ASSESSMENTS FOR MATH:

- Test of Adult Basic Education (TABE)
<table>
<thead>
<tr>
<th>CODE</th>
<th>TABE RESULTS (grade level)</th>
<th>CUSTOMIZED RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>9.4</td>
<td>90%</td>
</tr>
<tr>
<td>002</td>
<td>8.2</td>
<td>80%</td>
</tr>
<tr>
<td>003</td>
<td>7.4</td>
<td>60%</td>
</tr>
<tr>
<td>004</td>
<td>6.9</td>
<td>20%</td>
</tr>
<tr>
<td>005</td>
<td>6.9</td>
<td>40%</td>
</tr>
<tr>
<td>006</td>
<td>6.9</td>
<td>50%</td>
</tr>
<tr>
<td>007</td>
<td>6.7</td>
<td>20%</td>
</tr>
<tr>
<td>008</td>
<td>6.0</td>
<td>50%</td>
</tr>
<tr>
<td>009</td>
<td>6.0</td>
<td>30%</td>
</tr>
<tr>
<td>010</td>
<td>5.1</td>
<td>20%</td>
</tr>
</tbody>
</table>
COMPETENCY:

A demonstrated ability to perform a task successfully. In the context of the workplace, this is a workplace skills task which involves basic skills.

A COMPETENCY:

has a verb which indicates a demonstrated ability.

Example: Read, ask, sign
NOT learn, know, understand.

is in a workplace context.

Example: Read aisle numbers, report a problem, report a machine malfunction.
NOT read numbers, make a report.

Involves language skills.

Example: Listening, speaking, reading, writing.
CHECKLIST: Customized Curriculum

1. The curriculum lists work-related competencies approved by the basic skills committed.

2. The curriculum specifies instructional activities which are for a functional context, appropriate to the level of the students, and reflect the results of the literacy audit.

3. The curriculum identifies company materials, supplementary resources, and specific vocabulary of the worksite.

4. The curriculum should include samples of lesson plans and teacher developed materials.

5. The curriculum should include a post-test which measures each competency taught.

6. The curriculum is useable by all instructors and understandable by management.
Course Competencies: ESL for Production Workers

Level: High Beginning

Schedule: 3:00 - 5:00 Monday & Wednesday for 9 weeks (36 contact hours)

1. State job title and describe job duties.
2. Name departments and identify the materials used in each department.
3. Read and understand the company process flow chart.
4. Read Operator Basic List of instructions.
5. Give and follow simple oral directions to locate an object or a place.
6. Read a job card.
7. Give appropriate reasons for absence, in person or on the phone.
8. Give apologies appropriately when a situation calls for it.
9. Clarify/verify spoken speech.
10. Read and understand departmental memos.

From: A BASIC SKILLS CORE CURRICULUM for the MANUFACTURING INDUSTRY,
Linda Mrowicki, et. al., Workplace Education Division of
THE CENTER - RESOURCES for EDUCATION, (708) 803-3535
# COURSE SYLLABUS: ESL for Production Workers
## LEVEL: HIGH BEGINNING

<table>
<thead>
<tr>
<th>COURSE COMPETENCY</th>
<th>CORE BASIC SKILLS</th>
<th>COMPANY SPECIFIC TERMINOLOGY</th>
<th>ACTIVITIES</th>
<th>RESOURCES/MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator's basic list of instructions</td>
<td>Read for literal comprehension.</td>
<td>Non Technical Vocabulary: thickness, color, density type, noticed, width, set-up, put-up.</td>
<td>TPR</td>
<td>Realias &amp; Visuals of Company materials.</td>
</tr>
<tr>
<td></td>
<td>Read non-technical vocabulary.</td>
<td></td>
<td>Listening Exercises</td>
<td>Worksheets for Listening Exercises.</td>
</tr>
<tr>
<td></td>
<td>Read a diagram.</td>
<td></td>
<td>Information Gathering</td>
<td>&quot;Operator Instructions and Checklist&quot;.</td>
</tr>
<tr>
<td>Follow and give simple oral directions to locate an object or place.</td>
<td>Read dates. Read abbreviations &amp; know the referent. Read alpha-numeric codes. Read up to 2 place decimals.</td>
<td>Abbreviations on Job Card: ORD, QUAIN, CUST, LOC, DESC. Alpha-Numeric Codes: PO94156 .24 31.31</td>
<td>Information Gap Pronunciation Exercises Listening Task Cloze Exercise</td>
<td>Working in English pp. 134-137. Factory Floor Plan.</td>
</tr>
<tr>
<td></td>
<td>Read a Company JOB Card.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From: A BASIC SKILLS CORE CURRICULUM for the MANUFACTURING INDUSTRY, Linda Mrowicki, et. al., Workplace Education Division of THE CENTER - RESOURCES for EDUCATION, (708) 803-3535
CHARACTERISTICS OF
A QUALITY WORKPLACE INSTRUCTOR

1. Instructor as co-learner

2. Instructor as curriculum developer

3. Instructor as salesperson and cheerleader

4. The visible, yet invisible instructor

5. The adaptable, always accommodating instructor
## FOUR LEVELS of EVALUATION

<table>
<thead>
<tr>
<th>Level</th>
<th>Purpose</th>
<th>Instruments/Data</th>
</tr>
</thead>
</table>
| REACTION               | Obtain learner's input on the content, approach, and outcomes of the instruction | • "1 - 5" questionnaires  
                         |                                                         | • Open-ended questionnaires  
                         |                                                         | • One-on-one interviews  
                         |                                                         | • Focus groups |
| LEARNING               | Measure the amount of learning                                          | • Pre-post tests  
                         |                                                         | • Post tests  
                         |                                                         | • Competency checklists |
| TRANSFER OF LEARNING   | Measure the learning which has been transferred to the job              | • Performance checklists  
                         |                                                         | • Surveys - workers, supervisors, managers  
                         |                                                         | • Interviews - workers, supervisors, managers |
| ORGANIZATIONAL IMPACT  | Measure the program results on the company                               | • Production data:  
                         |                                                         | • Accidents  
                         |                                                         | • Complaints  
                         |                                                         | • Downtime  
                         |                                                         | • Errors  
                         |                                                         | • Productivity  
                         |                                                         | • Individual data:  
                         |                                                         | • Absenteeism/tardiness  
                         |                                                         | • Grievances  
                         |                                                         | • Performance Reviews  
                         |                                                         | • Promotions  
                         |                                                         | • Requests for ass't. with personnel issues  
                         |                                                         | • Suggestions |