ABSTRACT

One of 33 self-paced instructional modules categorized under 13 major headings, which have been prepared for training industry services leaders to provide guidance in the performance of industry service tasks, this module is an introduction for those who need basic information about the concepts and activities of industry services programs. (Industry services are tasks performed by a public agency or institution, directly related to manpower development for new and expanding private industry.) Seven learning activities cover various aspects of industry services and industry services programs. (The titles of the 13 major categories of Industry Services Leadership Development (ISLD) Modules are (1) Orientation to Industry Services, (2) Establishing Contacts and Relationships, (3) Obtaining Agreements, (4) Identifying Training Needs, (5) Acquiring Resources, (6) Training Instructors for Industry Services, (7) Preparing for Training, (8) Preparing Training Materials, (9) Selecting Candidates, (10) Monitoring Training Programs, (11) Closing Training Programs, (12) Placing Program Participants, and (13) Evaluating Industry Services Programs.)
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Instructional Procedure</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplementary Teaching/Learning Aids</td>
<td>1</td>
</tr>
<tr>
<td>Objective</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>2</td>
</tr>
<tr>
<td>Learning Activity</td>
<td>3</td>
</tr>
<tr>
<td>I. What Are Industry Services?</td>
<td>3</td>
</tr>
<tr>
<td>II. Who Benefits from Industry Services?</td>
<td>4</td>
</tr>
<tr>
<td>III. What Type Industry Services are Provided?</td>
<td>5</td>
</tr>
<tr>
<td>IV. What Procedures May Be Used to Initiate Industry Services?</td>
<td>7</td>
</tr>
<tr>
<td>V. What Procedures May Be Used to Prepare and Conduce Industry Services Programs?</td>
<td>8</td>
</tr>
<tr>
<td>VI. What Agencies Might Lend Assistance with Industry Services Programs?</td>
<td>13</td>
</tr>
<tr>
<td>VII. What Leadership Development Training Aids are Available on Industry Services?</td>
<td>13</td>
</tr>
</tbody>
</table>
INSTRUCTIONAL PROCEDURE

This module is designed to provide a brief overview of the industry services program. It is designed for those who need basic information about the concepts and activities of industry services programs.

To use this module; simply review the information provided. You will not be required to take a test on the subject matter. You are the judge as to when sufficient knowledge has been acquired.

SUPPLEMENTARY TEACHING/LEARNING AIDS

If you need more detailed information about the various topics included in this module, write or call the Coordinator of Industry Services, Research and Curriculum Unit for Vocational-Technical Education, College of Education, Mississippi State University, Drawer DX, Mississippi State, Mississippi 39762. Telephone (601) 325-2510. A list of 33 self-paced instructional modules available on the subject are listed on page 15. The following references will also provide additional information on industry services.

OBJECTIVE

After reading this module, you will be able to decide whether or not the industry services program can benefit your agency, institution, or firm. Your decision will be evidenced by either a positive response, or no response, to seek more information about the industry services program.

INTRODUCTION

Rapid industrial development is bringing new approaches to vocational-technical education. One new approach is "industry services for new and expanding industry." This approach to training calls for training programs to be developed for designated client companies. The reasons for providing custom-tailored training services is that most industries are not engaged in comprehensive training programs. Even though some larger corporations have training and development departments, it is recognized that, in many cases, assistance is needed by local training personnel to reach management's training expectations. It is clearly evident that proper recruiting, training, placing, and upgrading of personnel reduces turnover in industry, cuts production costs, improves the quality of industry products, and enables workers to adapt to changing industry needs.

Model systems for delivering industry services have been developed in Mississippi, Oklahoma, Louisiana, Florida, Alabama, Arkansas, and South Carolina. The Mississippi model involves a coordinated approach to providing industry services through state and local agencies and institutions. Self-paced instructional modules have been prepared for training industry services leaders to provide guidance in the performance of industry services tasks.

This module should clarify many questions you may have about the industry services program.
LEARNING ACTIVITY

Review the information presented in the following pages. Try to establish in your mind a clear picture of the total industry services program, including pre-employment and in-plant training. The questions which precede the information presented should help direct your learning.

I. WHAT ARE INDUSTRY SERVICES?

Industry services are tasks performed by a public agency or institution, directly related to recruiting, testing, training, upgrading, evaluating, placing, and advancing manpower for private industry. The services are provided when existing vocational-technical education curriculums are not applicable to the unique needs of industry, when participating learners in existing curriculums are not available for immediate employment, or when qualified manpower is not otherwise available in the community.

Some specific examples of areas in which training has been provided are listed as follows:

A. Assembling electrical equipment such as transformers, power circuit breakers, wiring harnesses, electric power tools, and vending machine changers.
B. Testing various industrial products.
C. Printing industry jobs, such as rotogravure engraving, paste-up and stripping, photography, press operating, and binding.
D. Manufacturing wood products, such as paper and building materials.
E. Constructing nuclear power plants.
F. Acquiring skills in welding, machine tool operation, tool and die work, maintenance mechanics, and industrial electricity/electronics.
G. Acquiring skills in warehousing and distribution.
H. Supervisory skills, such as human relations, first aid, time-and-motion study, quality control, and utilization of automated systems in industry.
I. Performing basic work skills such as industry-related math problems, reading blueprints and schematics, using electronic calculators, and using the metric system.
I. Obtaining assistance with work related problems such as transportation to and from work, and understanding worker benefits, company regulations, and company policies.

Industry services are directed toward single industry training needs. This requires a single set of training objectives to be identified for each industry. Training strategies are planned precisely around these objectives.

Industry services affects prospective workers, employees, supervisors, and managers. The services may be provided in public training facilities on the learner’s time, or the services may be provided in the industry facilities during working hours for presently employed personnel. Industry services may be provided for employed persons who desire to work for the client industry; unemployed persons seeking work; newly hired persons; and employees who desire to change positions within the industry, obtain promotions, learn new manufacturing techniques, and obtain wage increases.

The industry services program is assisting industries and private citizens to become increasingly aware of their training needs. Avenues are provided to gain upward career progression through training.

II. WHO BENEFITS FROM INDUSTRY SERVICES?

A. The participants. The industry services program is an important factor in moving the untrained, unemployed, and underemployed into increasingly productive and rewarding careers. There is immediate observable payoff for the industry services participants since the instruction provided is directly associated with actual jobs in industry. Each participant in an industry services program receives specialized training based upon clearly stated industry needs. Therefore, the participant’s value in the competitive labor market is significantly increased.

Much of the instruction during an industry services program is conducted by industry managers and supervisors. The face-to-face, first name encounters with industry managers and supervisors enables the participants to assess whether the jobs in the industry are compatible with their needs and interests. The participants learn how to function together as members of a team before actual employment.
The length of industry services programs is not limited to set class periods of hours-per-day or weeks-per-year. The flexibility permits custom designing programs to meet the needs of the industry and prospective employees.

Educators benefit from their involvement with industry services because industry representatives are innovators in task efficiency. Industry representatives may contribute new ideas about training practices which complement or improve the practices currently used in education.

B. The industry. Each industry services program is a partnership between industry and one or more local agencies. When job training is a joint endeavor, several benefits to the industry occur. Individuals are trained at a low cost to the industry, the persons who participate in industry services learn new skills which enable the industry to achieve increased productivity, and the industry is able to start operations more quickly and efficiently with better trained personnel. The eyes of the community are certain to focus on the industry and community partnership. Those who are involved in the industry services activities become "pipelines" for communicating the goals of the industry to the community. The cooperative efforts between the industry and local agencies to provide industry services elevate each organization to a new level of importance in the community.

III. WHAT TYPE INDUSTRY SERVICES ARE PROVIDED?

The two broad types of industry services provided to industry are: (1) pre-employment training; and (2) in-plant training. Pre-employment training is designed to prepare groups of new employees for immediate job opportunities. Pre-employment training is not limited to particular target groups. Many of the participants in pre-employment programs are already employed, but wish to compete for new jobs.

In-plant training is provided for newly hired employees, as well as for regular employees who can profit from upgrading instruction. In-plant training may be provided formally or informally on the production line, or formally in an area within the industry separate from the production line. The trend is to include both job-skill content and worker-oriented content in the in-plant training program.
Worker-oriented training is designed for individuals who have certain basic deficiencies which would hinder successful skill training as well as hinder progress on the job. The deficiencies may include basic math and reading, human relations, worker responsibilities, family planning, housing, health care, financial counseling, personal appearance, and transportation.

Although both pre-employment and in-plant training are often provided for a client company, one phase of training may be provided without the other. Pre-employment training is usually provided before a new plant opens or when an existing plant expands. A public training institution and the local employment service office recruit a sufficient number of trainees to meet staffing needs. Usually the pre-employment training program is conducted three or four nights per week for 9-16 hours per week. The classes are conducted at any time most convenient to the trainees, but most prefer evening classes.

Trainees in a pre-employment program attend classes on their own time without compensation. No charges are made to the trainee or to the company by the training institution. The trainees have no firm commitment that they will receive a job, but successful completion usually insures that a job offer will be made. Graduates of a pre-employment training program are not obligated to accept employment with the client company.

In-plant training is conducted on the production line or in some other appropriate area at the plant site. Client company supervisors almost always provide the instruction for in-plant programs. The time spent by the instructors in training is reimbursed by the public training institution.

In-plant training may be the second phase of training after graduates of a pre-employment program have been selected by the company. Another alternative is the in-plant training program provided for upgrading present employees.

In-plant training lasts as long as necessary to meet pre-established proficiency levels. The percentage of the supervisor's time in actual training diminishes as the employees near proficiency levels, and more time is spent on supervision.

Consumable material is not usually provided by the public training institution for in-plant training. Products manufactured by the employees during in-plant training are marketable, provided the products meet company specifications.
IV. WHAT PROCEDURES MAY BE USED TO INITIATE INDUSTRY SERVICES?

Many training and related services may be provided for a given industry. The expertise for providing the services may be coordinated with several different agencies. The services provided for industry may begin with the involvement of the state agricultural and industrial board, or other similar groups, who seek and find new industry for the state. The governor's office is constantly in reach of industry prospects from the various states as well as foreign countries. Local chambers of commerce and other groups interested in industrial development host representatives from industry who may wish to survey the community. Local industrial development groups can provide relevant information and data about site locations.

The state employment service provides statistical information about available manpower and average wage rates for the type industry in question. The state research and development center often conducts surveys in a local community regarding such factors as economic trends, energy sources, and population mobility.

The state division of vocational-technical education provides information concerning available start-up training services. The local public training institution provides information on the facilities and equipment available for training. Although these activities may precede specific training activities, they are vital factors in providing comprehensive industry services.

Since industry services are so diverse, leaders in the agencies involved coordinate among themselves the various activities. These leaders help avoid delays in services and management by crisis situations.

In order to encourage industry to move into the state or to expand present operations, public officials often make certain commitments regarding purchasing site land, issuing bonds for building construction, developing the site location, and training employees. The industry services leader from each agency involved assesses the commitments and proceeds to complete the services with the available resources. It is sometimes necessary to negotiate the specific terms of the original agreements and to bring them into line with the available resources. The negotiation sessions are handled in a constructive manner and every effort is made to accommodate the client company's needs.
Following the announcement of an industry's intention to locate or expand in a community, training plans may be initiated. The state coordinator of industry services arranges for a meeting with industry representatives and outlines in detail the services which are available from the state division of vocational-technical education, the research and curriculum unit, state employment service offices, and local training institutions. Quite often, the industry makes the initial inquiry into the services available. If industry responds positively to the services available, further meetings are arranged between the industry representatives and agency leaders to identify the functions of agencies involved in the service, to develop training agreements, and to develop a lead-time schedule of tasks to be completed.

The initial meetings between the agency and industry representatives are often conducted in an out-of-state parent plant. This usually gives the state representatives an opportunity to view first-hand many of the operations of the prospective industry. It may be possible on some occasions to collect most of the information needed to plan and conduct a training program during the initial plant site visit. However, it is usually necessary to make other visits to the parent plant for the purpose of interviewing workers, observing work in progress, and photographing/videotaping task procedures.

V. WHAT PROCEDURES MAY BE USED TO PREPARE AND CONDUCT INDUSTRY SERVICES PROGRAMS?
A. Obtaining agreements and commitments. The primary focus of industry services is training. The industry services leader first convinces the industry that training is an excellent investment. Although the various state and local agencies may provide much assistance without cost to the industry, the industry representatives must become aware that certain industry commitments are of vital importance. Industry is not led to believe that training can be conducted without assistance and commitments from personnel within the industry. These commitments are identified by arranging a meeting between the agency and industry representatives and analyzing the tasks which must be completed. Once the tasks are identified, the resources that must be provided for training can be determined. This serves as a basis for developing an
agreement which indicates (1) the tasks to be performed, (2) who will perform the
tasks, (3) what the cost will be for performing the tasks, and (4) who will pay for
the cost of training.

To insure that these commitments are fulfilled, a lead-time schedule is developed.
(Refer to module number III-B, Developing a Lead-Time Schedule.) The lead-time
schedule is a management tool which depicts the tasks to be performed and indicates
the starting and completion dates of the tasks identified. Someone is designated
overall coordinator/monitor of the various assignments during the industry services' project. The local administrator of vocational-technical education usually serves as
the overall coordinator.

B. **Identifying training needs.** The initial information collected from the industry
representatives during early meetings is used to obtain commitments and to develop
agreements. This information also suffices for determining the overall cost of the
industry services program. However, much more detailed information is required in
order to plan detailed training content. It is often necessary to make several more
visits to the parent plant site to interview workers, observe work in progress, and to
compile existing information on worker needs and production processes. Industry
representatives who assist in this effort are managers, engineers, supervisors, quality-
control specialists, and production-line workers.

Constant contact is maintained with the employment service representatives if
new personnel are needed for the training program. Employment service representatives
are able to provide information on persons available for training and establish wage
rates in the community for various types of jobs. This information is essential for
establishing the type content needed for the training program.

C. **Acquiring resources.** The extent of difficulty in acquiring instructors, a training site,
and equipment, tools, and supplies depends upon the type program offered. There
may be little or no difficulty in acquiring resources for an in-plant training program.
On the other hand, a considerable amount of time and effort are required to obtain
resources for a pre-employment training program which will utilize a public training
facility and equipment, tools, and supplies identical to those used in the industry.
These factors should be accounted for in the initial agreement.
Industry services instructors are usually selected from the ranks of experienced employees in the client company for both pre-employment and in-plant training programs. However, a faculty of qualified instructors at the training institution may be available for service if needed. It is essential that the most qualified instructors be selected for industry services programs.

The facilities and equipment in local vocational-technical departments may be available for training; however, training may also be provided at the plant site, using industry equipment, tools, and supplies. Some public training institutions have purchased mobile learning classrooms for use when other facilities are not available.

D. Training instructors. Probably no factor is more important to the success of an industry services program than properly prepared instructors. All participants in industry services programs are adults who will not tolerate failure on the part of the instructor or supervisor. Instructors are informed of their role in the training program as soon as possible. Every effort is made to involve them in all phases of planning for the program, including the development of all training aids prepared for the program. The industry services leader assists the instructors in organizing classes and in using the most appropriate training procedures.

E. Preparing training materials. With each company the industry services leader identifies the jobs for which training is needed, lists the tasks performed by individuals in these jobs, identifies the knowledge and procedures used to complete each task, writes performance objectives and standards for each task, and prepares training aids (e.g., manuals and videotapes) for each task covered in the program. The purpose of the training materials is to assist in training prospective employees to the performance levels desired by the company. The public training institution has no preconceived or artificial standards that must be met.

The trend in the development of training materials is to prepare self-paced units (modules) for each task or each set of closely related tasks. Self-paced units have particular use when learners differ vastly with regard to interests, abilities, knowledge, and attitudes, and when the instructor/supervisor does not have multiple-hour blocks of time available for instruction. Learning centers can be set up whereby each
F. Selecting candidates for training programs. An adequate supply of qualified prospects for training and employment can be provided to an industry. The state employment service offices have access to a state-wide computerized telephone/viewing screen hookup, which lists all jobs available and their locations throughout the state. Every citizen in the local community who may be interested has access to this information. This speeds up recruiting prospective trainees and skilled workers available for training and/or employment.

If necessary, an advertisement may be carried in a local newspaper, or through some other news media, requesting applications for the training program. Employment service personnel and training institution counselors work closely with the client company in recruiting, testing, counseling, and referring prospective employees.

Another approach is for the industry services leader to assist the client company in planning a training program for upgrading workers. In this type training program, assistance is provided in selecting workers who can profit from new or upgraded skills. The program may be conducted at the plant site or at the public training institution.

G. Conducting the training program. The industry services leader may make decisions at any point in the training program which assists in achievement of the training objectives. Each program is monitored from beginning to end and corrective action is taken when necessary to facilitate the work of the program staff. Time is set aside periodically to examine the effectiveness of the training activities. The ratings and accomplishments of each trainee may be reviewed periodically by company personnel. The ratings are a basis for continuing company production and expansion plans.

Each instructor plans a schedule of learning activities for the trainees. The learning activities parallel the tasks performed in the industry jobs. Additionally, the instructor prepares an agenda for each session and assembles and organizes the training aids to be used during each training session. The needs of the learners change...
as the program progresses, and adjustments in the training schedule may be required. The instructor advances each learner through as many learning experiences as time and ability permits.

H. Recognizing trainee accomplishments. The educational accomplishments of each program participant are recognized by the training institution. Certificates provide tangible evidence of achievement. A time is set aside for a formal presentation of the certificates by the school superintendent/college president, or some company official.

The most meaningful way to recognize accomplishments is to place each participant in a rewarding job, or to provide opportunities for advanced placement. Training programs should be motivational in nature, the results being that trainees set new employment goals. When these goals are reached, they will most likely strive for higher levels of achievement.

I. Evaluating and following-up industry services programs. Each industry services program is evaluated in terms of whether or not the objectives of the program were accomplished. Evaluation procedures consist of more than a written or verbal expression from a client company official that the program was effective. Evaluation activities are also interwoven in the process of monitoring all aspects of the industry service activities. Trainee achievement is measured during the course of training. Industry services instructors are interviewed to determine their assessment of the training program. Client company officials are interviewed during and following the training activities to evaluate the program. Trainees are interviewed after accepting employment with the client company to evaluate the worth of the training program.

Post-project evaluation is especially important during the critical early weeks of plant production start-ups. Detailed discussions and observations of workers' abilities and attitudes will reveal the strengths and weaknesses of the training program. Areas where additional training is needed can be spotted. An initial training program will not solve training needs once and for all. The public training institution provides training as long as it is needed from inception through expansion. The industry services leader continuously assesses industry training needs.
VI. WHAT AGENCIES MIGHT LEND ASSISTANCE WITH PROGRAMS?

A program of industry services may be available from a state agency, such as the division of vocational-technical education, state department of commerce, or the governor's office. In Mississippi, a state coordinator of industry services works out of the Division of Vocational-Technical Education.

A number of services are available from the Mississippi Industry Services Program. A quick-response, statewide coordinated network-of training is administered by the State Department of Education, Division of Vocational-Technical Education. Out of the statewide system of junior college vocational-technical training centers and high school vocational centers, one is likely near a plant site. The state coordinator for industry services provides the initial contact and coordination of industry services with new and expanding industries. The state coordinator also facilitates the acquisition of resources for local training programs when they are not immediately available locally.

Each local administrator of vocational-technical education designates a person to work confidentially with the client company. A training materials specialist from the Research and Curriculum Unit at Mississippi State University may also work with the state coordinator and the local administrator of vocational-technical education to analyze training needs and develop a program of action.

VII. WHAT LEADERSHIP DEVELOPMENT TRAINING AIDS ARE AVAILABLE ON INDUSTRY SERVICES?

A priority was recently established in Mississippi to provide an intensified program of training services for new, expanding, and existing industries. In response to this priority, the Research and Curriculum Unit for Vocational-Technical Education at Mississippi State University has developed a model Industry Services Leadership Development (ISLD) program. The program includes 33 self-paced instructional modules, each focused on new leadership knowledge, skills, and techniques relative to industry services. (Refer to the list of modules on the inside back cover of this module.) The model program includes a guide on how to get started toward acquiring the additional "know how" for providing effective industry services. The modules
are based upon a solid base of experience and research of the subject. Each module format uses the most up-to-date instructional materials practices. Agencies which might benefit from the ISLD modules are state divisions of vocational-technical education, vocational-technical education centers, in junior colleges and high school districts, employment services offices, and local industrial development groups. The modules may also be used by industry managers and supervisors to acquire new skills in industrial training.

The ISLD modules and associated materials may be obtained from the Coordinator of Industry Services, Research and Curriculum Unit for Vocational-Technical Education, College of Education, Mississippi State, MS 39762. Telephone (601) 325-2510. The entire set of modules is available at no cost to interested groups and individuals in Mississippi. Persons outside the state may purchase the set of 33 modules for $50.00. Single modules cannot be purchased.

If you need assistance in using the modules to plan and conduct workshops, conferences, or courses, contact by letter or telephone the Coordinator of Industry Services, Research and Curriculum Unit, College of Education, Mississippi State University.
LIST OF INDUSTRY SERVICES LEADERSHIP DEVELOPMENT MODULES

I. Orientation to Industry Services
   A. Introduction to Industry Services
   B. Industry Services Leadership Development Program: Guide for Using the Self-Paced Instructional Modules

II. Establishing Contacts and Relationships
   A. Speaking to Industrial and Community Groups
   B. Writing Articles for News Media
   C. Identifying Functions of Agencies Involved in Industry Services
   D. Developing a Brochure for Industry Services

III. Obtaining Agreements
   A. Developing Training Agreements
   B. Developing a Lead-time Schedule
   C. Interpreting Legislation Related to Industry Services

IV. Identifying Training Needs
   A. Collecting Framework Production and Training Information
   B. Selecting Types of Training Programs
   C. Preparing a Budget for an Industry Services Project

V. Acquiring Resources
   A. Selecting Instructors for Industry Services
   B. Securing a Training Site
   C. Securing Training Equipment, Tools, and Supplies

VI. Training Instructors for Industry Services
    Training Instructors for Industry Services

VII. Preparing for Training
    A. Adapting the Training Site to Training Needs
    B. Evaluating Safety Conditions at Training Sites
    C. Announcing the Opening of a Training Program

VIII. Preparing Training Materials
    A. Conducting a Task Analysis
    B. Developing Performance Objectives
    C. Determining Types of Instructional Methods and Media
    D. Developing Performance Tests
    E. Developing Training Manuals
    F. Preparing Videotapes for an Industry Services Program
    G. Setting Up Learning Centers for Industry Services Programs

IX. Selecting Candidates
    Developing a Plan for Testing and Counseling Applicants for a Training Program

X. Monitoring Training Programs
    A. Assisting in Providing Pre-Employment and In-Plant Training
    B. Developing a Procedure for Keeping Participating Agencies Informed About Training Program Activities
    C. Monitoring Training Programs for Progress and Expenditures

XI. Closing Training Programs
    Closing a Training Program

XII. Placing Program Participants
    Developing a Plan for Placing Graduates of a Pre-Employment Training Program

XIII. Evaluating Industry Services Programs
    Evaluating Industry Services Programs

Direct Inquiries To: Research and Curriculum Unit for Vocational-Technical Education, College of Education, Mississippi State University, Drawer DX, Mississippi State, MS 39762
(601) 325-2510