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This guide, based on the Model Workplace Literacy Training Program for Indiana State Employees established at the Indiana Women's Prison in 1991, provides practical advice on developing workplace literacy programs. The guide is organized in six chapters, following an introduction that describes the origins of the Indiana program and outlines the steps in its development. Chapter 1 provides background information on effective workplace literacy programs, and the main body of the guide (Chapters 2-5) concentrates on the planning and curriculum development that lead up to delivering classes in the workplace. Described in detail and accompanied by illustrative anecdotes drawn from the Indiana program are the following: (1) comprehensive procedures for planning and scheduling initial meetings with managers to decide on training methods; (2) literacy task analyses of specific jobs to determine basic skills problems; (3) development of custom-designed curriculum based on the task analyses; and (4) delivering instruction to target groups. Chapter 6 and its addendum describe the methods of evaluation used with the Indiana model program and the evaluation results. A bibliography lists 19 references. Five appendixes provide a sample timeline for a workplace literacy program, a literacy task analysis, a sample recruitment form, an example of a custom-designed curriculum, and sample job aids. (KC)
A Guidebook for Developing Workplace Literacy Programs

A Publication of Indiana's Model Workplace Literacy Training Program

1992

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A Guidebook for Developing Workplace Literacy Programs

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Foreword

Guide to Using This Manual

The goal of this guide is to assist individuals and agencies in developing workplace literacy programs. It provides practical advice on the various stages of program implementation: from initial planning and liaison with the workplace to evaluating the results of classes. Here, described in detail and accompanied by illustrative examples, anecdotes and cautionary tales, are comprehensive guidelines on:

- initial meetings with managers and supervisors to decide on training needs;
- literacy task analyses of specific jobs to determine basic skills problems;
- development of custom-designed curriculum based on the task analyses;
- delivering instruction to target groups;
- evaluating the effect of the program on learners and on their job productivity.

These stages are described using as an example the Moč Workplace Literacy Training Program for Indiana State Employees, established at the Indiana Women's Prison in 1991. The purpose of this program was to improve the job skills of workers in various parts of the prison, such as correctional officers and food service employees, in order to raise the standard of their work in areas related to literacy. A secondary aim was to improve learners' attitudes and practices in relation to literacy outside the workplace, in particular with regard to their children's literacy levels.

The emphasis in this guide is very much on the day-by-day processes of setting up a literacy program, and the main body of the guide (Chapters 2 - 5) concentrates on the planning and curriculum development that lead up to delivering classes in the workplace. Chapter 1 provides the necessary background on what makes for an effective workplace literacy program, and Chapter 6 and its Addendum describe in detail the methods of evaluation used with the Indiana model program and the evaluation results. The Introduction describes the origins of the Indiana program and outlines the steps in its development. Throughout the guide, general statements will be followed by highlighted specific examples drawn from the Indiana Model Workplace Literacy Program.
Acknowledgements

We would like to thank the following people who helped to make the Model Workplace Literacy Program possible. From initial contacts with the Indiana Department of Correction and the Indiana Women's Prison to the course participants themselves, and from the constant involvement of the Office of Workforce Literacy and Indiana University to various talented individuals who gave of their time, all played a vital role in the success of the program.

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Introduction

Developing Model Workplace Literacy Training Programs For State Employees

OVERVIEW

Governor Evan Bayh created The Office of Workforce Literacy in July 1990 to coordinate state efforts aimed at promoting literacy and upgrading job skills of Hoosier men and women. The Office of Workforce Literacy, a division of the Indiana Department of Workforce Development, implemented and funded a skills enhancement program entitled "Developing a Model Workplace Literacy Program for Indiana State Employees". The Indiana Department of Correction consented to participate in the program and selected one of its correctional facilities as the model site.

The key personnel for this project included workplace literacy researcher, Larry Mikulecky, from Indiana University, who coordinated the project, and Denise Henard, an adult education professional, who served as project director. The project, which was twelve months in length, ran from March 1, 1991 to March 1, 1992.

PROJECT OBJECTIVES

A key objective of this workplace literacy project was to develop a program which would integrate basic skills training with job related technical training. To offer training which bridged the gap between job tasks and literacy skills, much of the curriculum for this program was custom designed. Courses were developed, scheduled and delivered to allow sufficient class and practice time and to ensure long-term mastery of skills.

Another objective was to implement a multi-strand system. This project was multi-strand in the sense that several types of courses were
offered to meet the differing needs of the participants and to provide
them with a series of educational experiences. The program offered
three courses: a technical training course in report writing; a learning
skills support course for correctional officers interested in upward
transition; and a course in family literacy training to increase worker
literacy practice outside work and to address employee needs.

Finally, program objectives included gathering evidence of
instructional impact on learners' skill mastery, job productivity, and
family literacy behaviors. The results of assessing the model program
aided in revising and upgrading the courses, developing a plan for long-
term use, and extending the program model to other settings.

RATIONAL

The educational and information processing demands of most
occupations are on the rise. At the same time, many individuals
employed or available for employment in these increasingly complex
jobs have insufficient literacy and computational skills. With fewer
young people available to hire and more competition for moderate to
highly trained workers, many employers can benefit from incorporating
workplace literacy training and human resource development into
management plans. The alternative is to face increasing personnel and
productivity problems.

The Indiana Department of Correction chose The Indiana Women's
Prison in Indianapolis, Indiana as the site for a model workplace
literacy program. The Indiana Women's Prison was selected for the
model workplace literacy effort for state employees for several reasons:

1. Strong support for human resource training existed among the
leadership of the Indiana Department of Correction in general,
and the Indiana Women's Prison in particular.
2. Administration personnel at the Women's Prison exhibited a
willingness to modify current technical training to integrate
basic skills instruction.
3. The training staff was amenable to working together to develop
such training.
4. Department of Correction officials provided incentive
(overtime) pay for employees to attend the technical training
classes.
5. The population of 225 employees was enough to provide a sufficient number of workers who were experiencing a basic skills gap, yet small enough to be manageable for a model program.

SELECTING TARGET GROUPS

During initial planning meetings, prison officials and trainers suggested occupation areas and groups of employees for instruction. Target groups were suggested based on their need for basic skills improvement in jobs or based on a common need such as family literacy. Employees considered for instruction included correctional officers, food service employees, and single parents. Further discussion with on-site personnel determined that these groups met research and instructional parameters for this program.

ANALYZING JOB TASKS

The initial five weeks of the project consisted of an intensive study of the prison's policies, procedures, and practices. Project personnel interviewed custody line officers, supervisors, and trainers concerning job tasks and responsibilities. They collected and studied samples of employees' written work. Job tasks were analyzed to determine key literacy tasks and basic skills problems. This five week period was sufficient for project personnel to determine the skills involved in reading and writing the various reports that are required at the prison. Concrete examples gathered from employees' work samples highlighted basic skill areas in which many workers were experiencing difficulty.

DEVELOPING A RECRUITMENT PLAN

Recruiting students for this program required a collaborative effort. Several departments are responsible for the various duties within the prison. To ensure that all employees received information about classes, the project director, superintendent, training officer,
department heads, and education and custody supervisors all worked together to publicize the model program.

Department of Correction administration offered employees two key incentives to attend class. These incentives were: satisfying the 40 hour annual training requirement and being paid for attending class. Supervisors and administrators encouraged, but did not require, class attendance from their employees. The project director made efforts to schedule classes so that all could attend. Classes were offered throughout the work week to coincide with shift timetables so that most employees would be able to attend class either before or directly following their shift.

GATHERING BASE-LINE DATA

To test program impact, it was necessary to determine the state of affairs before the program began. Project personnel gathered base-line data on learners' literacy abilities, practices, plans, and beliefs. Data collected for each participant included: performance on existing reports, job and teamwork performance, absenteeism, problem-solving behaviors, and literacy behaviors on and off the job. In addition, assessment materials were developed to measure the quality of reports written by employees. Supervisor ratings of learner on-the-job performance were also developed.

DESIGNING AND GATHERING INSTRUCTIONAL MATERIALS

Curriculum and instructional materials for the technical training strand in report writing were developed once problem skill areas were identified and documented. The curriculum was designed around the tasks involved in writing prison reports. Curriculum developers gave attention to tasks which caused problems or resulted in errors for many employees. Much of the curriculum for the report writing course was custom designed by the project director and personnel from Indiana University. In addition, published materials relevant to report writing were gathered to supplement the curriculum.

The second course in this three strand program was entitled "Promotions". Correspondence course materials purchased from the
American Correctional Association were used as the basis for the curriculum. Moreover, the project director designed curriculum to meet the need for improving reading and study skills in understanding correction related topics. Individuals with special knowledge in particular areas of corrections took part in instructing this course.

Project personnel developed a third course to improve literacy skills of correctional officers and those of their children. After studying several family literacy programs, an existing program was chosen to serve as the focus of instruction for this strand. This program addressed family literacy issues and strategies through the school. To be specific to the needs of this workplace and to assess its impact and success, additional activities, curriculum, and assessment tools were designed.

DELIVERING INSTRUCTION

Report Writing

Report writing is a crucial skill for employees in correctional institutions because of the volume of documents written and the legal weight that they carry. Inmate rule infractions must be objectively described and documented, since the reports that employees write are often used in disciplinary hearings. Therefore, the classes in report writing were the most significant component of this three strand program. The "Report Writing" class sessions combined lessons in identifying and recording correct official details; composing a clear, concise, and comprehensive narrative account of an incident; and applying standard English grammar and mechanics practices.

Employees chose their class from four sessions offered throughout the project year. The classes met twice a week for twelve weeks, totaling nearly forty hours of instruction. Department of Correction administration provided incentive pay for employees attending the technical training strand in report writing. Each participant also received training credit based on the number of class hours attended.
Promotions Support

The second strand of this program addressed the employee population interested in preparing for job advancement. "Promotions" was open to correctional officers who met the minimum seniority and training requirements for promotion to the sergeant level. The goal was to prepare participants for the sergeant's test as well as to upgrade their skills for other post-secondary instruction.

The class time combined skill enhancement lessons with lecture and discussion on job-related topics. Instructors based these topics on the course materials or on subjects deemed important to the institution. The time spent in class numbered thirteen hours while a good deal of additional time was spent outside class completing assigned reading and writing in correspondence materials. Even though no incentive pay was given, participants completing this strand received a training certificate from the publishers of the correspondence course as well as training credit at the institution. Many learners signed up and took the sergeant's test following the course.

Family Literacy

Strand three of the model program provided family literacy training. The focus of this strand was to aid participants in improving their own literacy levels while helping their children at home. Two correctional officers from the Women's Prison and the project director attended special training provided by the Family Literacy Center at Indiana University. This program, "Parent Sharing Books", encourages parents and teaches them strategies in reading and sharing books with their children.

Books, tapes, and a program guide were purchased from the Family Literacy Center. The two employees, acting as parent leaders, worked to recruit other employees, as well as lead them in instruction in the "Parent Sharing Books" program. As for "Promotions", employees participated during off-work time and received credit toward training requirements.
EVALUATING INSTRUCTION

The outcome for the entire workplace literacy program included gathering evidence for program impacts. This consisted of measuring performance on reports, job tasks, attendance, teamwork responsibilities, and problem solving behaviors before and after each course. Following each strand, careful analysis of pre and post assessment data occurred. Project personnel used results to make program revisions when necessary, and to serve as documentation of the level of success for each strand and the overall program.

DEVELOPING A PROGRAM PLANNING GUIDE

The program planning guide you are now reading was developed as the culmination project for the Model Workplace Literacy Program for State Employees. The guide includes descriptions and samples of assessment methods, task analyses, instructional courses and materials, recruitment strategies, evaluation tools, and tips for effective program operation. The objective of the guide is to facilitate the transportation of this program to other sites.
Chapter 1

What We Know About Workplace Literacy Programs

OVERVIEW

Though a growing body of research has identified principles and elements associated with effective workplace literacy programs, few programs are able to incorporate all elements. Assessment of workplace literacy programs is further complicated by the fact that there appear to be a variety of workplace literacy problems, each calling for a different sort of instruction. Still, over the last two decades, we have learned a good deal about what to look for in effective workplace literacy programs.

For example we have learned that:

- there are several different workplace literacy problems which call for different sorts of instruction;
- improvement takes a significant amount of learner practice time;
- transfer of learning to new applications is very limited;
- significant learning loss occurs within a few weeks if skills are not practiced.

We have also learned that effective workplace literacy programs are characterized by:

- instruction which varies by population and is long-term;
- customized learning which integrates basic skills instruction with workplace applications and materials;
- active involvement by major stakeholders (i.e. management, employee organizations, instructors, and the learners themselves).
MULTIPLE PROGRAM STRANDS FOR MULTIPLE PROBLEMS

It is important to realize that we face several literacy problems in the workplace and not just a single one. The person who can't read at all requires different support from the high school graduate who can't meet the new reading demands of his job. People educated in a foreign language, but not speaking much English, require another sort of support. Providing the same services and programs to such different clients makes no sense, and yet it sometimes occurs.

Increasingly, programs in business and industry are becoming multi-strand programs. In such programs, one instructional strand might be available for English as Second Language learners, another strand for learners wishing to pursue GED certificates in preparation for further education, and additional strands for high school graduates preparing for technical training. Even the format for instruction may vary from structured classes to small group instruction, to computer guided instruction, to individual tutoring.

Bussert (1991) surveyed 107 workplace literacy programs described in the research literature. Of workplace literacy program descriptions providing sufficient information for judgments to be made, a clear majority (74%) offered a multiple strand curriculum (i.e. two or more of the following: ABE, GED, ESL, a selection of basic skills or technical courses).

IMPROVEMENT TAKES SIGNIFICANT LEARNER PRACTICE TIME

Training material and technical reading material in the workplace tend to range from upper high school to beginning college difficulty levels (Sticht, 1975; Mikulecky, 1982; Rush, Moe & Storlie, 1986). Some learners (i.e. high school graduates who need to brush-up reading skills) can learn to comprehend such materials with a minimum of instruction time (i.e. 30-50 hours), while other learners, who have extreme difficulty with even simple reading (i.e. signs, simple sentences), may take several hundred hours of instruction or, indeed, may never be able to comprehend some technical material.

Sticht (1982) reports that military enlisted men receiving 120 hours of general reading instruction averaged an improvement of 0.7
grade levels in reading ability. Enlisted men being trained with workplace materials improved 2.1 grade levels when reading work related materials during the same amount of time.

Gains do not come quickly. The average program takes approximately 100-120 hours of practice time for learners to make the equivalent of a year gain in reading ability. Auspos et al (1989) report that several hundred learners in a pre-work literacy program in 13 diverse sites across the country averaged 132 hours of basic education. Of the participants tested for reading gains using the Test of Adult Basic Education, an average 0.7 of a year gain in reading ability was demonstrated after approximately 100 hours of instruction.

Targeted programs using materials which learners encounter during everyday activities appear to make more rapid gains, but still take from 50-60 hours per grade level gain (Mikulecky, 1989). Computer learning programs may cut learning time slightly, probably since more reading practice and less discussion occurs. Haigler (1990) indicates that an average gain of 1.26 years was accomplished in an average of 78 hours of practice using computerized lessons in the JSEP job related basic skills program. This is equivalent to about 63 hours of practice for a year of gain.

Linking learning gain to practice time can be somewhat deceptive and misleading. A sense of perspective is needed. One hundred twenty hours per grade level gain is a bargain compared to the over a thousand hours spent by the average school child per grade level gain in school. The more effective workplace literacy programs report reducing learning time to 50-70 hours per grade level gain. No program, however, has been able consistently to improve the reading abilities of low-level literates to high school or college standards in 20 or 30 or even 50 hours. This is important to note because in many industries the standard training class is less than 30 hours. Also, some commercial products claim miraculous gains based on working with a few learners for a brief period of time.

The fact that literacy gains usually take more time than is typically allocated to workplace training presents a problem. For gains to occur, more practice time must be found. This can occur in several ways. Some programs immerse employees in integrated technical/basic skills classes full-time for several weeks. Other
programs provide sequences of courses allowing learners to move from one class to another, and eventually to courses at technical schools and community colleges. Still other programs include components which motivate learners to practice more at home, and thus increase total practice time. Programs that use workplace materials in training classes often reap the bonus of additional practice time as learners read these same materials more on the job.

TRANSFER TO NEW APPLICATIONS IS SEVERELEY LIMITED

Research is tending to indicate that there is a severe limitation to how much literacy transfers from one type of task to other types of tasks. Reading the Bible is considerably different from reading the newspaper, which differs significantly from the sort of thinking one does while reading a manual. Perkins and Salomon (1989:19), after reviewing the cognitive research from the late '70's through the '80's conclude that:

"To the extent that transfer does take place, it is highly specific and must be cued, primed, and guided; it seldom occurs spontaneously. The case for generalizable, context-independent skills and strategies that can be trained in one context and transferred to other domains has proven to be more a matter of wishful thinking than hard empirical evidence."

Further evidence of the limited transfer of literacy skills is found in results from the National Assessment of Educational Progress survey of literacy among young adults (Kirsch and Jungeblutt, 1986). This survey measured literacy abilities of young adults in three different areas (i.e. use of prose, document, and quantitative forms of literacy). Correlations among subject performances in these three areas revealed limited overlap in literacy performance (i.e. about 25% shared variance). Being able to read a newspaper was only partially related to being able to make sense of a document like a chart, table, or form. Some literacy ability will transfer, because document reading and prose reading are not totally separated skills. For most learners, however, this degree of shared literacy ability appears to be insufficient for transfer to occur easily. The idea of teaching someone to read a poem and expecting that s/he is going to be able to handle reading a computer screen is
probably a misplaced hope. What we want people to be able to do, we need to teach them. A few people are able to make great transfers from one situation to others. Such people do not appear to be the norm.

The limitations of literacy transfer have serious implications for workplace literacy programs. This is especially true if programs attempt to use traditional, school-type materials. Sticht (1982) found that general literacy training did not transfer to job applications. He now recommends a "functional context" approach which teaches literacy using the materials with which one is likely to function on a daily basis.

SIGNIFICANT LEARNING LOSS OCCURS WITHOUT REGULAR PRACTICE

The lack of transfer problem is related to the problem of learning loss. When a person cannot transfer learning to real-world situations, it is not possible to continue practicing what has been learned. This is important, because new knowledge must be used or it is lost. Sticht's (1982) report of military studies indicates enlisted men improve in literacy abilities while they are in general literacy classes, but that within eight weeks, 80% of the gains are lost. The only exception to this finding occurred when job-related materials were used to teach literacy abilities. In this case, learning gains held up. This is most likely because learners were able to see transfer and continued to practice the abilities they had mastered.

This finding is very important. It means that efforts and resources can be squandered if learners are taught with general materials which have no relationship to materials they see daily. It also suggests that the timing for workplace literacy training is important. Preparing learners for the basic skills demands of new jobs may be wasted if they must wait several months before they are able to apply and practice their new learning.

Some programs (Mikulecky & Philippi, 1990) have analyzed job tasks (i.e. in banking) and developed materials which employ strategies using both work and everyday materials. For example, careful reading of withdrawal and deposit slips involves reading, computation, and judgment. So, too, do reading and filling out forms
for mail-order catalogs and paying some bills. Instruction that alternates applying the same strategies to workplace and home materials offers increased possibility for practice at home and at work. Data are not yet available on the effectiveness of this strategy in stemming learning loss.

EFFECTIVE WORKPLACE LITERACY PROGRAMS

To be effective, workplace literacy programs must have well designed instruction, must make sense to all involved, and must be flexible enough to meet the needs of differing learners and changing situations. The discussion above highlights the importance of designing programs which integrate workplace basic skills instruction with several other types of instruction (i.e. technical training, ESL training, GED instruction, and low level literacy training). It emphasizes the importance of countering lack of transfer and learning loss by providing long-term practice with materials and activities directly related to the learners' everyday demands.

A recent study of 37 workplace literacy programs funded by the U. S. federal government (Kutner et al, 1991) identifies four key components of effective programs. These are:

1) active involvement by project partners,
2) active involvement by employees in determining literacy needs,
3) systematic analysis of on-the-job literacy requirements, and
4) instructional materials directly related to the job.

Bussert (1991) analyzed descriptions of 107 U.S. workplace literacy programs and found 92% to involve 2 or more partners. Sometimes the partners were multiple unions or multiple businesses or a school and business, or a government agency, a business, and a union. The most common types of partnerships among analyzed programs were the following:

- Employers working with others 88%
- Schools (public school, community college, and university) working in partnership with others 51%
- Unions working with others 34%
For recruitment and retention to be effective, each partner needs to play an active role during early stages of the program and a continuing role in supporting program goals. Involvement goes beyond leaders to include learners themselves who can help gather materials and make suggestions on how to expand the collection of custom-designed materials. It is usually those closest to the job who know what strategies are most effective in gathering information and solving job problems. For this reason, supervisors, team leaders and top job performers can help in analyzing job tasks and suggesting materials and approaches which they find effective in preparing new workers.

CONCLUSION

No single class or course seems able to meet the demands of the diverse populations within a workplace nor to provide a sufficient amount of instruction to move very low-level literates to the functional literacy levels called for in today's workplace. Multi-strand approaches involving several different types of courses and strings of educational experiences leading to long-term training goals appear to offer the highest probability of success. In addition, the active involvement of workplace partners in developing programs and directly linking instruction to workplace demands appear to be key to program effectiveness. A relatively few workplace literacy programs meet all these effectiveness criteria, but the degree to which these criteria can be accommodated appears directly related to program success.
Chapter 2
Planning and the Link to the Workplace

OVERVIEW

If you intend to design a workplace literacy program, you want to deliver a program which will be in tune with the needs of the workforce. How do you find out what these needs are? You begin with the following activities.

- Organizing a planning group
- Studying the job site and the workforce
- Identifying basic skills problems
- Determining available time and resources
- Formulating a plan for program development

This chapter will discuss the first steps you take to produce a successful workplace literacy program.

ORGANIZING A PLANNING GROUP

Your first step will be to meet with a planning group from the work site. Depending on the organization, your planning group may include administrators, department supervisors, or members of the training staff. Invite individuals into the planning group who are knowledgeable and interested in the training program or who are key decision makers.

The planning group can help in many ways throughout the term of your project. Part of this group's responsibility will be to introduce you to the workforce. They can help gather the job site and employee information needed to begin this training program. You may also need their assistance when it is time to recruit students. In addition, certain individuals in the planning group may be active in curriculum development or course instruction. Consistent involvement from this group of people will increase the probability of a successful and effective program.
STUDYING THE JOB SITE AND THE WORKFORCE

You should begin by collecting information on the status of the workforce. This information is important because it will help you make key decisions about the feasibility of a program. Ask your planning group to help you. Assessments of worker literacy abilities, though sometimes difficult to obtain, are extremely useful. Knowing the number of low-level literates (i.e. fifth to sixth grade level), ESL learners, and non-high school graduates can help you make program decisions.

Information on the current training program, workers' job descriptions, and samples of work will help determine the scope of literacy-related deficiencies as well as suggest possible target groups and remedies. Touring the job site and interviewing supervisors are also efficient ways to study the workforce.

Examining the Training Program

One of your first considerations will be to find out about existing training in the workplace. Determine if literacy-related instruction is part of the current training program. This would include any training that addresses basic skills instruction in the areas of reading, writing, and math.

Acquaint yourself with the training requirements of the workplace by finding answers to these questions. How extensive is the current training program? Which training activities are mandatory and which ones are voluntary? How is training scheduled? What types of activities are classified as training? What incentives are built into the training program? What types of training are offered and to whom are they offered?

Program Example: The training program for the Indiana Department of Correction varies from institution to institution. However, some training guidelines are followed by all employees. New employees undergo orientation at the work site. Within six months of employment, each person attends the state training facility for an additional forty hours of instruction.

Employees are required to attend forty hours of training each year. Some training courses are mandatory, such as C.P.R., First Aid, and Defense Tactics. Other training opportunities are chosen by employees, such as classes or workshops related to their job responsibilities. Employees receive training credit for a variety of activities - from fire drill participation to classes on weapons handling.
In an effort to coordinate and update training practices throughout the state, the Department of Correction is continually reviewing and revising its training program. Some of the current objectives include workshops for trainers and supervisory training. However, as the largest group, correctional officers continue to receive a large share of the training program.

Gathering Detailed Job Descriptions

If there are several different grades or levels for the same job, it will be helpful to determine the skills needed for each level of that job. Detailed job descriptions that outline the requirements for education, experience, and skills are sometimes available and part of the organization's policy. Knowing the requirements and the necessary skills involved for each job will aid you in determining skill deficiencies and measuring productivity in the future.

Program Example: There are several grades, or levels, of food service personnel at the Women's Prison. Specific tasks and responsibilities are expected for each grade. Certain education and experience requirements are also detailed in job descriptions. Employees desiring a move from one level to another may need to meet additional training and education requirements.

Choosing Target Groups

The planning group will help you gather information on the types of basic skill problems experienced in the workplace. Next, groups of workers will be targeted based on a need for improvement. The target group may be composed of several different job areas. Selected employees should represent a fair proportion of the total workforce population that is experiencing difficulty in their jobs. The group should be large enough to measure improvement, yet small enough to be manageable in terms of available resources, time, and support personnel for your program.

It is almost certain that you will not be faced with a single group of workers or a single skill deficiency to correct. Most likely, you will be working with individuals from diverse backgrounds and who possess a combination of literacy-related difficulties. For this reason, you will have greater success with a workplace literacy program if you offer more than one training course. A multi-strand program (one that provides a variety of learning experiences) can meet the needs of the various employees in the workplace.
Program Example: The model project addressed various groups of employees with widespread needs. The target group consisted of correctional officers, food service staff, and employees with elementary and middle school age children. Three strands of instruction were planned for the target group.

The first strand, technical training in report writing, was directed to correctional officers and food service personnel. A course geared toward officers interested in upgrading their skills or upward transition became the second strand. The third strand addressed family literacy training for parents helping their children while improving their own skills (by encouraging and facilitating literacy practice outside the workplace).

Establishing Supervisor Support

Establishing supervisor support from the outset is crucial. Although top administration may make the decision to implement this program, once started, you may be relying on middle managers' and supervisors' participation to continue a successful program. Supervisors sometimes spend too much time correcting their employees' mistakes. Supervisors who are the recipients of poor work can be an integral part of the information gathering system.

A workplace literacy program can appear very attractive to supervisors if:

- it is designed from the ground up to be cost effective;
- it is performance based;
- it is custom-designed around the problems in the workplace;
- and supervisors, themselves, are active in evaluating the program.

Collecting Work Samples

After you have collected the general information described above, you will need to identify more specific indicators of the literacy-related problems in the workplace. You may ask the planning group and job supervisors to help collect the following information which details particular problems.

Collect samples of work for the target group.
Request work samples that illustrate employees' literacy performance on the job. Work samples may include written
reports, inventory sheets, insurance forms, or correspondence to co-workers.

Document the types of problems occurring and the time spent correcting them.
Ask supervisors to collect samples of the inaccurate work they receive from their staff. Ask them to keep track of the types of things they often correct and the amount of time needed to revise or redo work so that it meets job requirements. Examples of the types of errors supervisors encounter in written reports may include misspellings, substandard English, incomplete or confusing sentences, or inaccurate or superfluous information. More subtle problems of unprofessional tone or undocumented assertions may also be present.

Document the frequency of need for additional instructions.
How much time do supervisors spend giving additional instructions to their staff? How often are documents prepared by administrators which simplify printed procedures or guidelines? How often do co-workers ask each other for clarification of job tasks? The answers to these questions may indicate particular basic skill problems and the range of the problems.

Touring the Job Site

Touring the job site will give you an opportunity to observe the workforce in action. Note such things as the size of the employee population, the type of work being done, the various departments and their functions, the structure of decision-making, and the extent of teamwork performance. Scan the job site for evidence of literacy materials such as safety signs, bulletin boards, computer stations, or information centers. Be aware of any obvious peculiarities in the workplace that may affect a new training program (ie. workplace atmosphere, employee attitudes).

Program Example: Before the model program began, project personnel toured the job site three separate times. Some correctional officers would stop what they were doing and explain their work area and their responsibilities. There was evidence of print materials in the form of posted
directives, bulletin board information, insurance pamphlets, various forms and
documents at work stations, and safety-related signs. Visitors witnessed an overall
commitment to job responsibilities and an attitude of professionalism from
employees.

IDENTIFYING BASIC SKILLS PROBLEMS

You can begin to designate areas needing improvement by
studying work samples collected by the planning group and
supervisors. Certain employees may have difficulty filling out forms,
writing memos or reports, understanding written directions, or
taking an inventory. Specific and concrete examples of difficulties
will help you determine which key tasks in a job many people have
difficulty doing.

Through interviews with supervisors, get scenarios of problem
situations. Collect several work samples from them which
demonstrate basic skill deficiencies. If you hear complaints about
grammar problems, specific examples may indicate difficulty with
subject-verb agreement, overly long sentences, or parallel structure.

To be accurate, collect supporting proof from people you
interview - not just their opinions. You will have a better idea of the
actual problems people have on the job once you are able to see
concrete examples of their work.

Program Example: We often heard from supervisors at the Women's
Prison that grammar was a problem in writing conduct reports. However, upon
studying several work samples, it was evident that grammar problems occurred
when individuals wrote excessively long sentences. Many page-long reports were
just a couple of sentences long. Therefore, we designed lessons addressing clear and
concise sentences.

Another example concerned misspelled words in reports. Upon closer
examination of actual reports, we found that many misspellings were words related
to the institution (counselor, infirmary, sergeant, etc.) or homonyms (to, too and
there, their). The concrete examples from employees' reports specified the
problems.

Other Indicators of Skill Problems

How much time do supervisors spend correcting employee
mistakes or explaining procedures to them? These activities are also
indications of problem areas. You may find that the same types of errors are being made by many in the workforce. Detailed records kept by supervisors may reveal a pattern of skill deficiencies.

Program Example: For many employees at the Women's Prison, the policy and procedure manual is difficult to read due to its format and content. Although most correctional officers use and understand the section detailing infractions, some are unfamiliar with the rest of the book because they rarely need to use it. If problems or questions do arise, it is much easier for the employees to ask their supervisor for advice than to use the table of contents or explanations in the book.

DETERMINING AVAILABLE TIME AND RESOURCES

Time and resources will have a major impact on your workplace literacy plan. The amount of time necessary to develop, deliver, and evaluate the program will need to agree with the amount of time you have available. This means some goals may be too ambitious for success to be possible. Also, knowing the types of resources and support available at the job site will help you determine the amount of time required to deliver training. Creating a realistic match of goals and resources is imperative if the program is to succeed and continue in existence.

Developing a Time Line

After analyzing the workplace and setting goals, you will know approximately the number of people with whom you will be working. You will also know a good deal about what is giving them problems on the job. Now you are ready to discuss a time line with your planning group. Training staffs are generally required to plan both long-range (yearly) and short range (monthly) training schedules. Consider the following questions:

How will a workplace literacy program fit in with the established training schedule? Schedule workplace literacy classes around other types of training in such a way that it enhances the current training program. Do not create scheduling conflicts - employees should be able to take literacy-related classes without giving up other training opportunities.
Can basic skills instruction be integrated into existing training programs?
This means developing instructional materials directly related to the job - linking instruction to workplace demands. An example would be to integrate basic skill instruction into health or safety related training. Many businesses require this type of training. You would design curriculum for particular literacy skills (such as reading and applying information from a chart) using job materials (such as the safety training manual).

How much time is being allotted for this program?
Expectations for improvement must be realistic. A workforce with many skill problems will require a large amount of instruction and practice time. Determine the best place to start.

You may be covering a variety of topics: from grammar and mechanics practices to locating the correct information quickly in on-the-job print materials. Recent studies show that 50 to 100 hours of instruction are required for a one year gain in the learner's reading ability. (See Chapter 1.) Short term training programs (20 to 30 hours or less of instruction) are unlikely to result in significant literacy gains for learners. Short training time implies clearly focused and achievable training goals.

Discuss with your planning group the number of classes that will be required to reach the targeted population. Analyze the combination of class time and reasonable practice time needed for a skill before someone becomes good at it. Your program should not be an eight hour workshop. If it is, don't expect more than what eight hours can give you.

Program Example: The model program at the Women's Prison consisted of a year long project that included three strands of instruction. The main strand was committed to improving the report writing skills of correctional officers and food service employees. The curriculum revolved around several basic skill deficiencies. Because class participants continued to write reports on the job, they could practice the skills outside class, too. Therefore, forty hours of class instruction was sufficient for this group to learn how to write good reports. In actual fact, many workers practiced more outside of class than the 40 hours of in-class time.
A variety of problems will not be solved with one solution. You are striving to meet a long term goal. Consider the following options:

- a series of short classes (possibly four to six weeks in length, with two to four hours of instruction per week) scheduled throughout the training year;
- integrating basic skills instruction with existing scheduled training; or
- a longer course (a semester or year in length) which would address several skill areas.

Often your first choice for scheduling classes is not compatible with work schedules or other programs. Be flexible - always have an alternative scheduling plan. Although training is an integral part of today's workplace, it will always be second to the day-to-day operation of a business.

Program Example: Schedule conflicts arose at the Women's Prison because custody personnel change shifts every three or four months. A shift change occurred in the middle of the first report writing classes. Four participants quit the class following their shift change even though another class was available to them. Other work responsibilities and child care concerns took precedence over the training classes.

Confirming Workplace Resources

Your planning group is invaluable. It would have taken months to collect the information described thus far without the help of the training staff, supervisors, and administrators. Confirm with your planning group what resources in the form of office and educational materials, working space, and training personnel will be available to you at the job site. Work from the start to take advantage of as many of these resources at the workplace as possible.

Certain personnel may be available at the job site to aid you in the on-going development and delivery of this program. After you determine the level of support available at the work site, you may need to plan on engaging additional personnel to gather data, develop curriculum, deliver instruction, or evaluate the program.

Program Example: During the model project, the Women's Prison provided office space and materials to the project director. In addition, a
FORMULATING A PLAN FOR PROGRAM DEVELOPMENT

After you have gathered sufficient information, the next stage involves writing a program proposal for the workplace. The proposal defines your program in terms of time, resources, support, and finances. You may be competing with other providers for the opportunity to deliver this program. Therefore, it is imperative that your proposal be completely, accurately, and professionally written.

In some cases, the planning group cannot be organized until the program proposal is accepted. However, it is still important to gather as much information as possible before writing the proposal. The following information provides guidelines for a program proposal.

A proposal is a written offer to solve a technical problem in a particular way, under a specified plan of management, for a specified compensation (Mills, 1986). It is useful to take a closer look at each part of this definition:

The written offer to solve a technical problem
describes the design or plan proposed.

The specified plan of management
explains to the reader how the entire project will be managed, tells who will manage it, and suggests a time schedule for the completion of the phases of the project.

The phrase, for a specified compensation
gives a detailed breakdown of costs in terms of labor and materials.

Stating the Rationale and Objectives

Your proposal for a workplace literacy program begins by focusing on the need for your services and what is to be done. You will accomplish this by presenting a project rationale and program objectives. First, communicate to the reader that you possess an understanding of their problem. Maintain an objective tone throughout, but stress the benefits of solving the problem.
Program Example: The program proposal written for the model project detailed the need for workplace literacy training for state employees. It discussed the need for incorporating workplace literacy instruction in today's training programs because of the increased demand for highly skilled workers. The proposal further outlined the problems of many training programs today, such as single emphasis programs which address limited needs of employees and lack of assessments to aid program revision.

You will deliver a stronger case if you are able to present proof that a program such as this works. Cite current research, discuss similar programs and findings of professionals in the area of workforce literacy. Information, such as that presented in Chapter 1 of this guidebook, lends credibility to your rationale.

Previous meetings with the planning group can help to establish the need for a concentrated and unified effort. When such meetings are not possible before constructing a proposal, telephone conferences with key personnel may be a partial substitute. Recognize that support from the workplace is instrumental in reaching the program goals.

You are cautioned not to be overly optimistic in your estimates for performance and schedules. Be realistic and prudent in what your program outcomes will be.

Program Example: The Department of Correction chose the Indiana Women's Prison for a model project site because of staff willingness to work together to modify current technical training to include basic skills instruction.

Personnel at the state and institution level supported and welcomed the opportunity to take part in this program. The Women's Prison plan proposed to develop and implement a high-caliber model workplace literacy program which would integrate basic skills training with job related technical training. The program objectives also called for a multi-strand approach to instruction by offering employees a variety of educational experiences. This guidebook meets a final objective by presenting a set of guidelines and samples of effective program elements.

Presenting a Step-by-Step Plan

The program plan is a detailed, step-by-step outline of the project. It explains each task involved in meeting program goals. Avoid vague generalities and sweeping statements. Paint the clearest, most complete picture you can of what this workplace literacy program will be.
To some extent, you have already begun your plan by contacting and meeting with the planning group, targeting individuals for instruction, and collecting work samples and examples of problems. This enables you to gauge the feasibility of this program, and to have enough data to present a plan.

Once the program is underway, the bulk of your time and energy will be involved in developing, delivering, and evaluating courses. You may develop several courses as part of a multi-strand workplace literacy program. Your program plan outlines the steps you will take to provide these courses. Because each course is being custom designed specifically for a particular workplace, you may want to follow the seven step development plan outlined below.

1. Analyze job tasks to determine key tasks and basic skills problems.
2. Develop a recruitment plan.
4. Design instructional materials.
5. Gather related supplementary materials.
6. Deliver instruction.
7. Evaluate instruction through post assessment of learners and comparison to base-line data.

Program Example: The model project plan recommended a three-strand program. Each strand in the model program was developed, delivered, and evaluated by following the seven step process outlined above.

One strand addressed the need for well-written reports. These report writing classes, which integrated basic skills and technical training, had an impact on the greatest number of employees.

A second strand recruited a more specialized group: correctional officers interested in upward transition. A learning support course was developed for this group of individuals interested in taking the sergeant's exam.

A course designed to improve parental literacy skills was developed as the third strand of the program. Employees in this strand participated in literacy-related activities to help their children while improving their own literacy levels.

Specifying a Management Plan

How long will this take? The time line for your program should reflect a realistic time schedule for proposed work. The time
schedule, in conjunction with the program plan, demonstrates how the project will be managed. A time line aids the reader's understanding by consolidating information and presenting it as an overview. See Appendix A for an example of the time line used for the model project.

Your time line will illustrate all components of the project so that your reader can comprehend the sequence, intensity, and length of each activity. The time line helps the reader to see that the tasks involved in developing this program (the seven step plan) overlap at times, and supplementary personnel may be needed occasionally during the project year. Expectations for program success will be gauged by the time line.

Throughout the project year, tasks involved in developing each strand often overlapped. For example, during the time when instruction was being delivered in report writing classes, materials were being gathered and designed for the promotions support course, and students were being recruited for the family literacy strand. At this time, supplementary personnel were needed to meet all the obligations of the program.

Identifying Key and Supplementary Personnel

You will include in the proposal a current resume for yourself and other key people contracted to work on this project. Ensure that you have an adequate number of qualified individuals to carry out the tasks detailed in your plan. Be specific when describing duties and responsibilities for each of the key personnel. Your proposal should illustrate the importance of each person's involvement in the program.

You may need to employ supplementary personnel at certain times during the project year. Include in your proposal which tasks may require additional assistance and build this into the program budget.

Program Example: The proposal for the model project listed three job areas requiring qualified personnel.

The Project Coordinator's responsibilities included training all program personnel in performing job-based literacy task analysis and developing custom
designed curriculum. The coordinator was also responsible for designing project assessments and evaluations and analyzing program data.

The Project Director's duties included consulting with the coordinator on issues of program design, instruction, and materials development and selection. The director's main responsibility was to direct the day to day operation of the program which included: assessing student needs, gathering data, delivering instruction, and evaluating the progress of students and the program.

Supplementary personnel were employed at various times throughout the program year to help with developing curriculum, designing evaluation materials, and analyzing data.

Preparing a Program Budget

You must give careful consideration to the budget for this project. Employ reasonable pricing practices to represent financial responsibility. Your budget will detail costs for salaries for key and supplementary personnel, office and educational materials, telephone, postage, travel and other miscellaneous items. Plan carefully - you will not be able to add to this budget once the proposal has been accepted.

Be thorough when planning a budget. Determine if there are materials, services, or personnel at the job site to which you will have access. You may find that you can keep from duplicating items that are already in place.

Submitting Your Proposal

Prepare your proposal to submit to the individuals involved in the decision-making process. The proposal will be your guideline throughout the duration of the project. It will help you stay on target in terms of time, finances, and management. Once the program proposal has been accepted, you are ready for the next step: analyzing job duties to determine key literacy tasks.
CHAPTER 2 CHECKLIST

The beginning stages of a workplace literacy program require careful and thorough planning. Use the following checklist to guide your progress.

✔ Organize a planning group

✔ Study the job site and the workforce
  ✔ Examine the training program
  ✔ Gather detailed job descriptions
  ✔ Choose target groups
  ✔ Establish supervisor support
  ✔ Collect work samples
  ✔ Tour the job site

✔ Identify basic skills problems

✔ Determine available time and resources
  ✔ Develop a time line
  ✔ Confirm workplace resources

✔ Formulate a plan for program development
  ✔ State the rationale and objectives
  ✔ Present a step by step plan
  ✔ Specify a management plan
  ✔ Identify key and supplementary personnel
  ✔ Prepare a program budget
  ✔ Submit your proposal
Chapter 3

Analyzing Job and Literacy Tasks

OVERVIEW

Your proposal for a workplace literacy program has been accepted. Your project has officially begun. This chapter discusses how you analyze job and literacy tasks to begin developing curriculum. It will also consider the steps to take before the first students walk into your classroom. Chapter 3 details how to complete the following activities.

- Analyzing job tasks
- Conducting a literacy task analysis
- Developing a recruitment plan
- Gathering base-line data for learners

ANALYZING JOB TASKS

To make your training tie into the needs of the workplace, you will need to become very familiar with the job tasks required of your target group. After you have analyzed employees' job tasks, you can determine the literacy-related skills involved in successfully completing job responsibilities.

There are several things you will want to do to analyze the job tasks in the workplace. You will collect literacy materials, interview a variety of workers, observe employees on the job, and determine and prioritize the tasks involved in a job. Before you begin activities that require the time or cooperation of the workforce, always obtain permission from administration personnel.

Collecting Samples of Literacy Materials

During interviews and observation, you document the tasks involved in doing a particular job. At the same time, collect samples
of literacy materials. Literacy samples include any print materials workers come into contact with on the job, such as printed directions, policy manuals, inventory forms, or insurance pamphlets. Discuss the materials you gather with the people you interview to determine their importance and their frequency of use.

Program Example: At the Women's Prison, correctional officers use forms and the Adult Disciplinary Policy booklet to report offender conduct infractions. Knowing how to use both of these materials is vital to the successful completion of the job. Another example of significant literacy materials would be the recipe manuals used by the food service staff to prepare meals for over 400 people each day. However, materials outlining new insurance procedures or providing union information, though important, are not necessary for the day-to-day operation of the workplace. Such materials would have lower priority for beginning instruction.

Interviewing the Workforce

Schedule interviews with various employees: supervisors, training personnel, group leaders, and members of your target group. Choose interview subjects who are most likely to cooperate with you. Interview the supervisors with whom you will be working closely throughout the term of this project. Ask for help from your planning group in selecting members of the target group to interview. You will want to interview employees who will provide you with correct and complete information. By interviewing a variety of people, you gain a broad perspective of what is expected from workers.

During interviews, supervisors can tell you what a finished product or high quality work should look like, errors they often encounter, or what they expect from workers in terms of teamwork performance. A trainer may describe the educational or training requirements for a certain job or which jobs require a great amount of training. A member of your target group may tell you what is expected of them on the job and the problems they experience. They may also relate discrepancies that occur between policy and practice.

Program Example: To analyze job tasks for correctional officers and food service staff, supervisors in custody, training, maintenance, and food service were interviewed. Also interviewed were correctional officers, screening officers, department heads and counselors. Below is a sample of the questions asked during interviews at the Women's Prison followed by explanations and examples.
**Instrument Example:** What are the education and training requirements for a member of your target group?

This is a question for a personnel director or member of the training staff. The answer will give you information on the past educational and training experiences of the workforce.

What are the basic skill problems employees experience in the current training program?

You may ask this question of trainers, supervisors, or administrators. The goal is to pinpoint specific examples of skill difficulties. These problems may occur in new employee training when reading directions for a certain procedure, or during training for experienced workers learning new advanced methods for their job.

What basic skill problems do you see which affect productivity?

Immediate supervisors of target group employees will be best able to answer this question. If the supervisors have been tracking skill difficulties, as requested earlier, they have documented examples of the types of problems occurring and their effect on productivity (such as time factors, teamwork performance, leadership qualities).

What is the most important literacy-related task performed by the target group of employees? Next most important task?

This question may be answered by members of the workforce and supervisors. The answer will help you to prioritize the literacy skills required on the job. For instance, at the Women's Prison, correctional officers' ability to write reports was second only to maintaining safety and security at the institution. In report writing, employing correct grammar and mechanics practices were described as being highly desirable, but being able to compose an acceptable narrative account of an incident was determined through interviews to be much more important.

What types of print materials are used on the job? What problems are experienced with these?

Supervisors, trainers, administrators, or members of the workforce may respond to this question. Examples of print materials would be any forms, correspondence, or manuals that workers come into contact with or use in their jobs. The problems you document for these types of materials may include difficult reading level, confusing directions, unclear language, or a variety of other literacy-related problems.

Always remember to make the most of your interview time. If you find the interviewee is reluctant to speak or is giving brief responses, try obtaining more information by requesting examples of what you want through prompting: For example, you may say, "Can you tell me what happens when this form is not filled out correctly?" or "Can you give me another example of this type of problem?" or "What happens next?"
Observing the Workforce

Interviewing individuals at the work site is but one way to gather information for a workplace literacy program. You will also find it valuable to collect information about job tasks by observing the workforce in action. Discover beforehand any parameters that may exist that prohibit you from entering certain work areas. Plan with the appropriate individuals your presence in the work areas you want to observe.

If possible, schedule a day to shadow, or follow, certain employees throughout their shift. You will be able to get a more realistic viewpoint of the responsibilities and pressures employees experience. Plan questions to ask employees during this time. Try to get a clear understanding of what is done in a certain area and why it is done. It may even be possible for you to document activities with a camera, cassette recorder, or video recorder.

**Program Example:** Due to the nature of her duties, the screening officer was a good choice to interview and observe at the Women's Prison. This officer was responsible for screening and correcting all conduct reports written by staff before a hearing is scheduled. The screening officer described in detail what is checked on each report, the report's path of travel in the hearing process, and the types of common errors occurring on reports. She collected examples of finished reports and indicated problem areas to share with project personnel. Her responses and activities were recorded by taking notes and using a cassette recorder.

You may also observe the workforce by experiencing or monitoring training exercises. If the occasion arises, take part in new employee training to understand the amount of information given to new employees as well as the method of delivery. If this is not possible, ask to see the training plan for new employees. Other training exercises (such as on-the-job safety) may be scheduled during the early stages of your program. Make every effort to experience or monitor actual training exercises.

**Program Example:** All employees of the Department of Correction are required to attend a forty hour new employee orientation. The director for the model project was able to attend most of one course with two new correctional officers. It was a first hand experience which illustrated that new employees receive a large amount of information upon entering the institution. The training officer distributed policy and procedure booklets, conduct guidelines, and various other print materials during this time. The delivery method for most information was largely oral, with supplementary instruction delivered through watching video tapes and reading text.
Correction officials realize that new employees are expected to learn a good deal of information quickly. Therefore, each employee attends the state training facility within six months of employment to receive additional instruction, as well as reinforcing their earlier training.

Following your interviews, observations, or participation in training sessions, review the information you have received from different sources. What are considered to be the most important job tasks? Is the current training addressing the needs of the workforce to learn these important tasks? Where do discrepancies, confusion, or problems exist which can be remedied with literacy-related training?

CONDUCTING A LITERACY TASK ANALYSIS

A literacy task analysis is a method for analyzing the aspects of job tasks that require reading, writing, computation, and problem solving (Mikulecky, 1985; Drew & Mikulecky, 1988). You now know how a person does their job and the materials which they use on the job. The purpose of a literacy task analysis is to identify areas in which worker performance needs to improve. You identify such areas by understanding the thought processes employed by workers when using print materials on the job. You will use the data you collect from the literacy task analysis as a basis for designing curriculum for your classes.

In a literacy task analysis, you list each task which has been identified as necessary to complete a certain job. Next to each task, you list what a person needs to know to carry out that task. An employee may require several literacy-related skills to complete a task. For instance, one task of a job may be to enter certain information on a form. The employee doing this job may need to employ the following literacy skills for this task: using an index, interpreting and locating information on a chart, and making decisions based on procedure guidelines. Each literacy skill needed to complete a task becomes a topic for a possible lesson in the classroom.

The way a person does a job and the literacy skills needed to complete that job provide you with the information to develop curriculum and assessment materials for your program. The literacy task analysis conducted at the Women's Prison focused on the skills...
needed to write effective conduct reports. See Appendix B for an example of this literacy task analysis along with indications for instruction and assessment.

DEVELOPING A RECRUITMENT PLAN

More than likely, you will be competing with other training and job activities to recruit students for your workplace literacy program. For this reason, offer the same class at different times during the year so employees will have an opportunity to attend. Heavy work schedules, vacations, or illness may prevent someone from taking a course the first time it is offered.

Recruiting students for your program requires that you reach all employees in your target group. Encourage members of your planning group and other key workplace figures to work with you to recruit students. On-site personnel are more familiar to the workforce than you are, and their involvement will lend credibility to your program. Following are several recruitment methods that have proved successful in other workplace literacy programs.

Providing Incentives

Your job would be easy if all employees signed up for training programs because they recognize the need to upgrade their skills. The fact is, incentives play an important role when enticing people to take part in special training. Programs with built-in incentives prove to have better participation than those that do not.

The employer may decide to offer monetary incentives, such as pay for attending classes or a bonus paid at the completion of a course. However, incentives may take other forms:

- attendance fulfills training requirements;
- participants receive special recognition from supervisors;
- students receive certificates in employment folders; or
- course completion offers an increased opportunity for upward transition.
Other incentives which have been successfully employed by workplace literacy programs tend to focus on external awards (i.e. free meals, lotteries with attendance providing chances, and donated gifts). Amenities and support may be provided such as child care at the site or refreshments during class. Learner involvement in planning instruction serves as an incentive in that learner goals in and out of the workplace are attended to (e.g., literacy tasks involved in buying a house).

Program Example: The administrators at the Women's Prison offered a variety of incentives to participants in the model project. Employees attending the technical training strand in report writing received overtime pay for attendance. In the case of incompatible class and work schedules, some employees were relieved from their work area to attend class. Custody officers were not required to work mandatory overtime on the day they had class. All participants in the model project received credit toward mandatory training requirements, completion certificates in their personnel folders, and recognition by the Department of Correction.

Using Supervisors to Recruit

Supervisors of your target group can be helpful in recruiting. Remember, supervisors are the individuals who witness the basic skills errors being made on the job. Supervisors are often the ones who correct the errors of their workers. They may be able to recommend attendance in a course to certain employees who are having trouble in their job.

Supervisors can recruit employees who receive low performance ratings to help them raise their level of performance. The relationship you have with supervisors is vitally important. Their support and input means you will present a program which addresses the real problems and makes the time spent in class valuable.

Be aware of the rights and attitudes of employees concerning recruitment. In some places, recruitment by supervisors may be welcomed by the workforce. However, on other work sites, recruitment by supervisors may be viewed by the workforce as giving special treatment to certain individuals or as violating employee confidentiality about literacy difficulties. Discuss recruitment strategies with managers, union officials, or other decision-makers in the workplace.
Being Visible

If confidentiality is not a major issue, it will be useful for you to become visible to employees. Workers notice even slight changes in the work atmosphere. Beginning with your first visit to the work site, engage employees in conversation. Show interest in their jobs and introduce yourself to workers who are group leaders, or shift supervisors.

Recognize and strive to recruit the leaders within your target group. These are employees looked up to by other workers, and if they sign up for a class, others may follow. Stress the "buddy system" in your recruitment strategy. Recruit co-workers who enjoy each other's company.

Make yourself visible and available to workers often. Schedule information sessions before a work shift. Display program information in employee lounges or cafeteria settings.

Program Example: Security is the highest priority in a correctional institution. Getting to know employees was not always easy because of the nature of their work. To recruit people for each course, the project director attended roll calls and addressed correctional officers, spoke to department heads at their meetings, partnered with the training officer and visited various work areas, posted flyers and registration forms in break areas, and displayed information in the payroll office.

For the family literacy strand an interest/needs survey was given to employees to spark their interest. An area in the employee lounge was used to display materials while a speaker explained the program. In addition, a workshop on family stress was conducted, and three orientation sessions were held to recruit workers for this strand.

Twenty-three percent of the employees who took part in one strand in the model program went on to take one of the other two courses. In fact many students recruited co-workers for later classes. Recruiting people for workplace literacy is difficult the first time, but it is easier to get people to continue once they have started.

Appendix C displays a sample recruitment pamphlet developed for the workforce at the Indiana Women's Prison. The pamphlet was designed to inform the workers of the new workplace literacy program and to register them for its first class.
GATHERING BASE LINE DATA FOR LEARNERS

To assess program impact, it is necessary to determine the state of the workforce before literacy-related training began. You have recruited students for your program and you want to see evidence of strengths and weaknesses in their work. This means gathering base line data on learner abilities by collecting work samples and other information.

Interviewing Learners

Conduct interviews with program participants to determine their needs and expectations of training. You can schedule interviews before classes start or during the first few class sessions. Gather information from each person concerning their length of employment, job assignment, range of tasks and responsibilities, and history of employment and training. Ask participants to bring samples of their work or problems they are having to the interview to help measure their abilities. Through the interviews, gather several samples illustrating each worker's abilities.

Collecting Pertinent Data

What type of base line data should you collect for a workplace literacy program? Your outcome goals will determine the type and amount of data you collect. There are many aspects of employee performance and behavior which may be targeted for improvement by long term training. Some examples are:

- literacy behaviors and performance;
- timeliness of job tasks;
- teamwork performance and morale; and
- attendance.

Concentrate on gathering information which is available for most employees. Document or collect indicators of work and literacy behavior such as attendance records, evaluation forms, teamwork performance reports, test scores, and work samples. Supervisors, personnel directors, payroll clerks, and training staff can be very helpful in collecting this type of information.
Program Example: Data that was gathered for the workplace literacy program at the Women's Prison was indicative of the desired outcome goals for the program. Attendance records, performance evaluations, supervisor assessments, test scores, and samples of written reports were collected to help measure improvement of participants as well as the success of the program. Desired goals for this program included improvement in literacy behaviors, job performance, teamwork skills, and attendance. (See Chapter 6 for details of the evaluation of the model program.)

If you have assistance from the staff at the work site, gathering data becomes much easier. However, it is always a time consuming job which can contain many pitfalls. Following is a list of considerations, problems, or situations you may encounter when collecting data for your project.

Ascertain the availability of records and work samples. Confidentiality policies or incomplete records will affect data gathering. Decide what records and work samples are available to you that indicate skill levels of employees. Base your goals for the project on measurable data, not what sounds good.

Become familiar with record keeping procedures. Employees whose duties are to keep records have a system for tracking individuals. You must learn the format for keeping records for such things as attendance, disciplinary actions, or promotions. If several people are responsible for doing these jobs, you may need to learn several systems to gather data.

Employee turnover affects data gathering. An employee may quit, transfer, or be terminated during your project. If the employee is involved in your program, this will have an impact on your results. You will not be able to collect post assessment information on these individuals.

Establishing a Control Group

If possible, establish a control group of employees who are not currently taking part in any workplace literacy training. Collect base line data for members of the control group as you would for participants in your program. You can compare the data for the control group to the data for course participants. This will determine whether changes occurring with employees in any of the studied
areas have occurred as a result of training or would have happened anyway.

For instance, some employees see training as an added incentive for coming to work, and so training can improve attendance. If one of your outcome goals is to improve work attendance through training, you will want to gather attendance data for your students before, during, and after they have taken training. You will collect the same data for your control group. Compare the information you have gathered to determine if attending basic skills training does affect attendance records.

Some data is not easy to assess. It may be necessary to construct methods to assess the quality of some of the data you gather before you can measure improvement or compare it to your control group.

Program Example: Samples of conduct reports written by employees were collected for participants in the report writing courses and for a control group. Project personnel designed a special assessment form to measure their quality. Literacy-related skills used to write a report (See the Literacy Task Analysis, Appendix B) were rated using an agreed upon scale. Personnel rating the reports arrived at an agreed rating scale by listing examples of varying quality for each skill. For instance, examples were given for writing direct quotations. One of the examples depicted incorrect use of direct quotes which illustrated poor quality and received a low score. Another example listed a well-written quotation that was indicative of high quality work and a high score. Raters had to agree among themselves what constituted a good or poor quality report before they could apply the rating scale to the work samples.

Gathering and assessing base line data for learners will enable you to measure their improvement when the course is completed. Analyzing workers' job and literacy tasks will provide you with the information to develop the type of course curriculum which will generate that improvement. Chapter 4 discusses developing instructional materials from the job and literacy task analyses.
CHAPTER 3 CHECKLIST

During this stage of program development, you have learned about analyzing job and literacy tasks. Before you begin developing curriculum, make sure you have attended to the following items.

✔ Analyze job tasks
  ✔ Collect samples of literacy materials
  ✔ Interview the workforce
  ✔ Observe the workforce

✔ Conduct a literacy task analysis

✔ Develop a recruitment plan
  ✔ Provide incentives
  ✔ Use supervisors to recruit
  ✔ Be visible

✔ Gather base line data for learners
  ✔ Interview learners
  ✔ Collect pertinent data
  ✔ Establish a control group
Chapter 4
Curriculum Development

OVERVIEW

Effective workplace literacy programs bridge the gap between basic skill deficiencies and job tasks. Develop curriculum for your program which builds bridges of instruction. This chapter discusses the techniques for developing curriculum including:

- Designing instructional materials
- Developing job aids
- Gathering supplementary materials

DESIGNING INSTRUCTIONAL MATERIALS

Custom designed curriculum consists of instructional materials you develop using the literacy task analysis. This usually involves integrating the instruction for job tasks with instruction in literacy skills necessary for job performance. You use the workplace literacy samples to create instruction which most closely resembles job tasks.

Utilizing Job Materials and the Literacy Task Analysis

By this point, you have collected several kinds of literacy materials with which to design curriculum: policy documents, procedure manuals, forms, and work samples. You have also gathered information on the literacy skills and specific knowledge needed to use these job materials. Now, you can take the materials and design curriculum around them by applying the information you have gathered.

Choose a job task and its corresponding literacy skill from the literacy task analysis. For instance, the literacy skill may be "locating appropriate information in a procedure manual", or "applying knowledge of workplace policies". Gather any job print materials
that are necessary to complete the selected tasks. Now you are ready to integrate training techniques with job skills and materials.

Let us say you are designing a lesson for locating information in a procedure manual. The procedure manual becomes part of the lesson. Teach techniques for locating information in the manual, such as identifying key words or headings, studying a table of contents, or using an index. Instruction time will be relevant to participants. They are using actual on-the-job materials and learning at the same time.

Carefully study the need for custom curriculum and the feasibility of developing it. Designing your own instructional materials is a time consuming project. You will need to make decisions about which lessons you create, based on available time and resources, and the importance of the task you are teaching.

Program Example: Most of the curriculum designed for the model project was for the technical training classes in report writing. The Adult Disciplinary Policy, state issued forms, and screening procedures were used extensively to develop materials.

Project personnel custom designed approximately 50% of the curriculum for the model project. Each lesson developed from the literacy task analysis took three to ten hours to design. For this reason, choose carefully the lessons you develop. For detailed examples of custom materials, see Appendix D.

Getting Help From Others

The time spent designing curriculum may be one of the stages of the project requiring help from other individuals. This depends on how much time you have to design lessons and the amount of curriculum to be developed. Be sure that you have allowed yourself sufficient time before courses begin to design the necessary curriculum. "Design as you go" has a high chance for failure.

Refer to the project time line. Have you determined this stage as one needing support from other personnel? Are there qualified people available to help you? If you have proven the need for additional personnel during the planning stages of the project, and built them into your budget, you will now be able to employ and compensate them.
Additional curriculum designers may be trainers or other qualified individuals at the work site, or outside providers contracted on a part-time basis when necessary. You have become very knowledgeable about the workplace by this time, but supplementary personnel may not be as familiar. Because your program is customized to the needs of the workplace, it may be necessary for you to familiarize the supplementary staff with the data you have collected on the workforce.

Program Example: Supplementary personnel designed a portion of the curriculum for report writing classes. One individual was a correctional instructor who had served in various capacities in the Department of Correction (DOC) for many years. His extensive background knowledge, job experience, and talents enhanced his ability to develop curriculum. His lessons revolved around role playing and decision making situations.

A second curriculum developer was a doctoral candidate from Indiana University. He designed instruction which focused on grammar and mechanics lessons or writing techniques using corrections-related materials (video or printed scenarios). Although this individual's background was different from the DOC employee, he was able to address another need of course participants.

**Reviewing Custom-Designed Materials**

The type of training you present must be valid. Carefully analyze the accuracy and suitability of the materials you create. It is your job to develop curriculum that effectively spans the gap between skill deficiencies and job tasks.

Design materials based on the information you have from interviews, observations, print materials, and the literacy task analysis. Measure the suitability and accuracy of your materials by reviewing them with members of your planning group, trainers, or supervisors. The rationale for doing this is that discrepancies occur between policy handbooks and job practices. Some departments at the work site may be run differently from others.

Another reason to review materials is to ensure that you are not conflicting with training that is already in place. Spend the extra time it takes to review your materials one last time before they are presented to a classroom of students.
Program Example: For every custom designed lesson, the project director asked a supervisor or trainer at the Women's Prison to screen the material for suitability. Revisions were occasionally made to concur with procedure guidelines or accepted practices at the institution. For example, this institution has its own terminology for certain procedures and practices. Curriculum developers were sensitive to this and created lessons which were compatible with the prison's terminology.

You may find after completing the literacy task analysis that the number of skills to be taught is more than your program can handle in one course. Or you may find yourself in the position of not having sufficient time and resources to design all the curriculum you would like. Consider using published materials or designing job aids to handle this situation.

DEVELOPING JOB AIDS

Sometimes when you analyze a job, the solution to correct skill deficiencies is to simplify the task with a job aid. A job aid restructures information so that it is more accessible and comprehensible to workers (Mikulecky, 1990). Job aids can also be used when there is not sufficient time or funds to train all the employees. They may be designed to provide information for workers, to reinforce workplace literacy training, or to provide ongoing support for workers after classes are completed.

Job aids are productive as part of a workplace literacy curriculum, too. Reinforce classroom instruction by utilizing them on the job as part of practice time. If workers are expected to improve their basic skills performance, they must be allowed sufficient time to practice these skills. Using job aids provides much needed practice time. You may also train participants in the use of job aids during class time. When a difficult skill is introduced, knowing how to use a job aid that simplifies the skill will enable a worker to experience success in the classroom and on the job.

Program Example: For the model project, several job aids were developed. One aid was a document which illustrated the correct grammar and mechanics rules to apply in report writing. This job aid was used in the classroom as part of the instruction for these two areas. Students used the aid to compose accurate reports or to proofread and revise exercises.
Job aids, like custom designed curricula, are based on the literacy task analysis. Although the format may vary, all job aids are designed to improve job performance. A job aid may take the form of a flowchart, a checklist, or a list of instructions. It may include prompts, or clues, to indicate what type of information is needed or the correct procedure for fulfilling a task.

Program Example: Project personnel designed job aids for correctional officers and counselors. One job aid was developed for taking notes to write conduct reports. It was designed to organize details quickly and completely. The job aid included prompts that acted as memory jogs to the writer. For example, words such as "who, when, witnesses, and evidence" were listed in a small notebook so officers could quickly jot down pertinent information. The back of the job aid consisted of a mini-glossary of words often found in these types of reports. When it was time to write a report, the writers would have the necessary information at their fingertips.

You may include examples in your job aid. For instance, the goal of your job aid may be to help workers write complete sentences. Begin by stating, "Writing complete sentences gives the reader a clear picture of what you are saying." Follow this statement with correct examples of complete sentences relating to something they may write on the job. You may also list examples of fragment or run-on sentences to illustrate the way a person may become sidetracked or confuse their reader. Whatever format you choose for your job aid, the goal is to lead workers to deliver quality work. For additional examples of job aids, see Appendix E.

GATHERING SUPPLEMENTARY MATERIALS

You will need to gather suitable published materials to supplement your curriculum. Supplementary instructional materials may be adult education materials, vocational texts, or training publications. You will choose materials based on their compatibility with the literacy task analysis, the custom designed curriculum, and the needs of the workforce. An adequate blend of custom designed and published materials will provide your students with a job specific and comprehensive course.

As you have seen, designing your own instructional materials takes a great deal of time, energy, and knowledge. Successful workplace literacy programs contain a good deal of customized curriculum, but be careful that you don't try to reinvent the wheel.
Publishers have realized the extensive market in the fields of adult education and vocational training. There are many excellent materials on the shelf today which you can use in your courses. You will probably encounter several choices in your search for supplementary materials. Some choices are: adult education materials, post-secondary texts, correspondence courses, vocational texts, professional journals, technical publications, and training materials.

Program Example: The model program took advantage of several sources of published materials. Articles from professional journals in corrections often offered information that could be applied in the classroom. Post secondary grammar and composition texts were helpful in teaching some parts of report writing. Correspondence course materials became an integral part of the promotions course curriculum. Established family literacy programs and materials helped to develop the curriculum for the family literacy strand.

An example of excellent off-the-shelf materials is the correspondence courses published by the American Correctional Association. The materials which we purchased for use in the model program addressed correction issues for the experienced officer. We used these materials with officers interested in upgrading their job status. The books were written at a reading level understandable to people in this group. The lessons were divided into manageable blocks of instruction and presented case studies and practical exercises to the reader.

Determining Sources for Good Materials

Where do you find published materials that will help you teach basic skills in the workplace? Workforce literacy is becoming an important part of many training programs. There are probably more sources than you realize for good supplementary materials. There are many places you can go to discover some excellent materials to complement your curriculum. For instance, go to your planning group. Ask them if they are aware of any materials to supplement literacy based training in the workplace. They may have been exposed to some new techniques or materials at conferences or symposiums they have attended.

For additional instructional materials, examine professional publications and organizations related to the workplace. You may locate advertisements or information endorsing materials you can use in the classroom. Search for appropriate supplementary materials through college bookstores, libraries, or vocational training centers. You may also check within your state for government
agencies, related occupational fields, or private industry groups which can offer guidance or materials to your program.

Curriculum designers, training directors, publishers of textbooks and training materials, and others are interested in things that work. Once you have located and used various materials, you may find it beneficial to communicate with these individuals to discuss suggestions for revision, uses for their product, or ideas for further development. By keeping the lines of communication open, you will be able to stay abreast of new findings and information to enhance the field of workplace literacy training. You may even be able to help guide the development of future materials.

Program Example: During the course of gathering materials for the three strands of instruction, project personnel established rapport with agents from several areas. A representative from the publisher of correspondence materials was interested in how their materials complemented literacy-based training. A project director for a school-based family literacy program took the time to revise their program so it would meet the needs of the workplace. A national clearinghouse for correctional training materials sent related materials to help with curriculum development and asked for a copy of this program planning guide for their collection. Other relevant materials or information were obtained from the state police training academy, Indiana University, and the Office of Workforce Literacy.

Evaluating the Suitability of Published Materials

You may use published materials as part of the core curriculum, to reinforce instruction, to serve as a resource guide, or to provide enrichment. To gauge the suitability of published items, some things to consider are:

- the intended use of the material;
- the reading level;
- the delivery method of instruction;
- the extent of coverage of subject matter; and
- the price of materials.

Program Example: Printed materials were chosen for the model program based on the above points. In addition, qualified staff members volunteered suggestions for selecting compatible materials. Care was exercised so that materials purchased for the workplace literacy training did not conflict with, or duplicate, other required training courses.
Some strands of instruction will rely more heavily on off-the-shelf instruction, while other strands will lean toward a more custom designed approach to curriculum. The needs of your target group, and the goals and objectives for your program will help guide your decisions concerning curriculum development. The next chapter will discuss bringing all the necessary components together to deliver effective instruction.

CHAPTER 4 CHECKLIST

In this chapter, you have learned how to develop curriculum for your workplace literacy program. See the checklist below to make sure you have taken care of all the details to bring together the right blend of custom designed and published instructional materials.

- Design instructional materials
  - Utilize job materials and the literacy task analysis
  - Get help from others
  - Review custom designed materials

- Develop job aids

- Gather supplementary materials
  - Determine sources for good materials
  - Evaluate the suitability of published materials
Chapter 5

Delivering Instruction

OVERVIEW

Classes in workplace literacy training are now ready to begin. You may be active in teaching the courses which you have developed. It is likely that you will be responsible for maintaining and revising this program, as needed, throughout the term of the project. This chapter will discuss techniques to make the best use of your time when you are:

- Delivering instruction
- Evaluating instruction
- Reporting results

DELIVERING INSTRUCTION

For many people, the only phase of a workplace literacy program they observe is the classroom portion. All the elements for making your program effective should be represented in the delivery of instruction. The classroom and what goes on in it tell the story. All the components must be in evidence.

Presenting an Effective Program

First and foremost, classroom instruction should reinforce the principles of an effective workplace literacy program. As previously discussed in Chapter 1, successful literacy based training programs share several common elements. These elements include:

- providing a variety of learning experiences to solve an assortment of basic skills problems;
- involving project partners and employees in sharing in the planning and delivery of the program;
- linking instruction and learning materials to workplace demands by custom designing a program; and
• presenting long-term instruction which provides sufficient learner practice time.

By providing a variety of educational encounters, you will be able to meet more needs of your workforce. Refer to all the examples you and others gathered of basic skills problems. You did not see just one type of problem, you witnessed several of them. You cannot remedy all skill deficiencies with a single course of instruction. Offer an assortment of classes to your workforce. It may not be possible to correct all the literacy related problems through your program, but all your careful planning should help determine which courses of study will be the most important ones to present.

Program Example: Three "strands" of instruction were offered to correctional officers: technical training to improve basic skills performance; promotions support to enhance skills and increase promotion possibilities; and family literacy to boost general literacy skills. Because the needs of this population were diverse and widespread, a multi-strand program was necessary to address the concerns.

The success of your program depends on a collaborative effort between you and the employer. It begins with the planning group and it continues with the learners. They are the major stakeholders of this program. Active involvement of these project partners and course participants is imperative.

The project partners help mold the program through their decisions and support. They will be the ones to decide how the program will continue and expand. The learners, on the other hand, are directly influenced by the training you present. Their input is invaluable concerning their learning needs and the adequacy of the curriculum. They will be able to give you immediate feedback on the lessons which you develop.

Program Example: The project partners at the Women's Prison included the training officer, education supervisor, screening officer, and various supervisors. Each one contributed information based on their job responsibilities and expertise. All contributions were valuable in either gathering data, developing curriculum, delivering instruction, or evaluating the program.

Course participants provided input during the delivery of instruction. They specified areas of instruction which were not applicable to the actual job situation. This occurred when job practices called for variations from the state-wide general policy. Revisions were made to present realistic curriculum. Learners continued their involvement past the end of the course. They shared in surveys and interviews immediately following and six months after one course to suggest revisions and to report gains in job performance.
Basic skills training must be realistic to be successful. Students need to connect training to what they are doing on the job. The time spent in class should reflect an extension of job tasks. Remember, you need to teach people what you want them to learn. A custom designed program links training to job demands by using on-the-job materials and the literacy task analysis to develop curriculum.

**Program Example:** Presenting a curriculum which bridged the gap between job tasks and basic skills performance was the keystone of the model program. Of all the elements mentioned here, this one is the most important and made the program distinctive.

The work samples collected at the start of the project revealed the skills connected with report writing which people were having difficulty doing. The results at the completion of the program proved that learners made gains in their report writing skills. This happened because they were taught a curriculum which incorporated on-the-job materials with the specific reading, writing, and problem-solving skills needed to write a good report.

Build ample instruction and practice time into each course you present. Improvement and retention take a significant amount of time to achieve. As Chapter 1 reports, general reading improvement takes about 100 hours per grade level gain. Focused instruction can shorten the time, perhaps to 50 hours. For a successful program, you need to provide long-term and continuing learning experiences.

**Program Example:** Providing ample practice time to participants of the model program was accomplished by offering a forty hour technical training course. Learners accumulated significant additional practice hours by using the same materials on the job as were used in the classroom. For most participants, this was sufficient to improve their basic skills performance. However, the few students exhibiting severe skill deficiencies would have benefitted from additional instruction.

For the family literacy strand, individuals shared print materials with their children. Parent leaders and the program director provided materials, instruction and activities to support their endeavors. This program was conducted over a four month span and practice hours for individuals varied. However, the individuals who spent the most time involved in this strand, showed the largest learner gains.

Choosing and Training Additional Instructors

If appropriate, choose and train additional instructors to teach workplace literacy classes. Additional staff may be from an outside provider or a member of the training department in the workplace. The individuals who are interested in tackling these duties may not
be familiar with the type of program you are presenting. Provide enough time for preparing instructors to ensure that anyone you train can function independently in the classroom.

You may want to begin training additional staff by having them audit a class you are teaching. Or, you may train someone by team teaching with them. Become a mentor and include additional staff in the decision making process. Provide them with experiences in troubleshooting and problem solving which may occur with this type of program. In the event that your time at the work site is limited, it is likely that someone you train will assume the duties of teaching or expanding the program.

Program Example: A correctional educator at the Women's Prison participated in some instructional sessions during the second wave of the report writing class. This individual needed a small amount of direction from the project director to teach this course. His educational background and workplace experience enabled him to present lessons of his own design which followed the objectives of the course.

Additional support staff may come from other sources. For instance, you may be teaching a course which deals with specific workplace topics. Invite staff who are knowledgeable in special areas to speak to your class or to help you prepare a lesson with the most accurate information available. Topics may crop up which are beyond your expertise, but important to the curriculum. Often times a blend of workplace experts with educators is the answer.

Program Example: "Guest" speakers were invited to take part in the delivery of classes for all strands of the model program. This was an area where people were willing to share their knowledge with the group. Their involvement often resulted in confusion being explained, alternate solutions being found, or new information being presented.

For example, the screening officers spoke to the technical training classes to explain why reports do not pass the screening process. They also provided correct formats for learners to follow. Attorneys from the Department of Correction (DOC) addressed students regarding the legal ramifications of reports and common problems they encounter. A correctional officer who served as the weapons specialist at this institution presented a mini-workshop to inform workers of the new guidelines and weapons training mandated by the DOC. The staff psychologist at the prison delivered an eight hour training session on family stress management for the family literacy strand.
Selecting Classrooms and Scheduling Class Times

It may not sound critical, but where and when you teach can be as important as what you teach. Select appropriate classrooms for your training. If you have options, there are several factors to consider when choosing a class site.

Choose a site which is familiar to the workforce, and if possible, hold classes in the established training area. Your class site should be free from distractions and have access to necessary supplies and services (i.e. audio/video hook-up, literacy materials). The location should be comfortable for students in terms of seating, ventilation, and even amenities (i.e. rest rooms, refreshments, smoking area).

Program Example: It was rare when workplace literacy classes could be held in the training area at the Women's Prison. This meant alternate class sites had to be secured. This was difficult because there were few available areas to conduct class during the day.

One class site which appeared to be ideal was abandoned. The room was suitable and was generally used as the staff dining room. However, the windows provided course participants with a view of the yard and they were often distracted by offenders they could see on their way to dinner. Other classes were held in the education building in the beauty school, conference room, library, or business classroom. These areas were much more suitable as they provided a private area with all the necessary resources.

Another important factor is scheduling. Schedule class times so that they don't interfere with other work activities. Check with several sources to determine all possible schedule conflicts which may occur. Other training exercises, heavy vacation months, intervals of excessive overtime, and shift changes can easily disrupt your program. You may not be able to work around all the obstacles, but schedule classes to provide the best opportunity for attendance.

Program Example: Most of the custody staff at the prison change shift times every three or four months. One such shift change occurred during the first technical training class. Four students were unable to continue with the class and for many other individuals the shift change caused attendance problems. During the second wave of technical training classes, a more flexible course schedule allowed students to attend even in the event of a shift change.
EVALUATING INSTRUCTION

The workplace literacy curriculum may include several series of the same class. Evaluate instruction to make program revisions and to gauge the need for additional courses. Evaluate the classes from both the student and instructor level to continue delivering the most comprehensive and suitable instruction possible.

As you or others teach the courses, there are many ways to evaluate instruction. Allow class participants to take an active part in the evaluation process. Evaluation through assessment materials is only one way to gauge the success of your program. Informal evaluations, work samples, and observations from participants and supervisors can be helpful in measuring program success.

Documenting Observations and Comments

Some indicators of progress or success are observations, comments, requests, or suggestions made by the workforce. Another measure of progress are job promotions or increased job responsibilities for individuals who have taken training. Although these indicators are informal, they are quick and easy ways to let you know if you are getting the job done. The following examples were collected from the Women's Prison:

- Comments from supervisors and the screening staff on the obvious improvement of reports;
- Additional classes requested by line staff and supervisors to accommodate the entire workforce;
- Expanded instruction desired in technical training for supervisors, and promotions course for lieutenants;
- Information requested for college registration, special education needs, career training, and financial aid.

Program Example: Some participants in the model program experienced changes in work status. Two clerk-typists took report writing to improve their skills to become correctional officers. Both employees were reclassified as correctional officers. Other employees applied for and received more desirable assignments at the prison (e.g., major's secretary, education officer, visiting room).

Most officers attending the Promotions strand were striving for a sergeant's classification or a higher score on the sergeant's test. Others took the class to upgrade their skills as correctional officers. Two types of test were employed for this strand:
the state's sergeant's test and the test given upon completion of the correspondence course. Where corresponding data was available (for one test), course participants scored an average of 4% higher than other test takers. (For further details, see the Addendum to Chapter 6.)

REPORTING RESULTS

You may find it necessary to report results to your planning group or to management personnel during the course of your project. You may decide to report results at the mid-point of the project after one course session has been completed. By preparing a clear and detailed report of progress, you will be able to present current strengths and weaknesses of the program. Begin by scheduling a meeting with your intended audience. Organize program results in an attractive and easy-to-read manner. Consider including the following information which was presented to administrators at the Women's Prison:

- Work samples collected before and after participants engaged in workplace literacy training (highlighting areas which indicate skill improvement);
- Rating scales for reports written before and after training;
- Attendance rates for course participants before, after, and during training;
- Quotes from course participants and their supervisors noting differences in practices or attitudes, or changes in work habits or performance; and
- Informal course evaluations written by participants at the mid-point or conclusion of the course.

Displaying Program Results

You may wish to arrange the program results in a small, attractive packet with the program title or logo on the front. Do not include volumes of documentation, rather, limit yourself to a small number of pages which communicate your message. If applicable, utilize graphs to present information, such as attendance patterns and job performance, in a clear and compact fashion. You may also want to compare your learners' results to a control group which has not had the benefit of training.
Mid-project evaluation meetings are useful for continued success. You can discuss with your audience any frustrations you have encountered, adjustments to be made, or assistance needed to enhance training. There may be areas of strategy to redesign or budget concerns to address. If you wait until the end of the project term, it will be too late to do anything about these problems. Indeed, these problems may hinder the continuation of workplace literacy training. Analyzing and reporting progress at intervals throughout the project, provides a format to report final program results.

Presenting Information to Others

There may be other individuals interested in your program in addition to the people directly involved in it. Trainers, education providers, or related professions may be intrigued by your program. You may be asked to present a lecture at an educational or training conference, or you may be interested in writing an article for a professional journal. You will find it very useful to document fully your program's progress to be able to disseminate the information for a particular audience. This type of workplace training program is not the standard "off-the-shelf" program. It is something special and valuable. People will want to hear about it - remember, we are always interested in things that work.

Program Example: Several times during the model program year, project personnel were asked to present information about the program at educational conferences. In addition, articles about the project were written for state wide and national professional publications. Requests for program information were received from individuals nationwide.

Preparing for the Future

The success of your program will help determine the future of workplace literacy. Be prepared to advise the planning group concerning which types of literacy-related training are indicated for the future. Documentation of course participants' post assessment and job performance will help present a stronger, clearer case for continued instruction. Prepare a menu of choices for additional strands, revised courses, or alternate formats to present to the planning group. Strive to implement a plan for continued and expanded literacy training for the workforce. Chapter 6 discusses
how to evaluate program success and elaborates on the results of post assessment data at the Indiana Women's Prison.

CHAPTER 5 CHECKLIST

This chapter provided procedures and examples to aid you in delivering and evaluating instruction. Follow the guidelines below to implement an effective workplace literacy program for your learners.

✔ Deliver instruction
  ✔ Present an effective program
  ✔ Choose and train additional instructors
  ✔ Select classrooms and schedule class times

✔ Evaluate instruction
  ✔ Document observations and comments

✔ Report results
  ✔ Display program results
  ✔ Present information to others
  ✔ Prepare for the future
Chapter 6
Methods of Evaluation

OVERVIEW

In order to evaluate a workplace literacy program, you must match evaluation techniques and indicators to the major goals of your program. In a multi-strand program, this involves gathering information on program impact in several areas (i.e. changes in learners' literacy at work and at home, impact on productivity, and special areas of impact in the case of family literacy efforts). In Chapter 3, we discussed in general terms how you could collect learners' base line data before literacy-related training began. In this chapter, we will be discussing in more detail instruments you can use to collect data for impact assessments using a mixture of standardized tests and custom-designed measures: interviews, questionnaires and cloze tests. In addition, we will examine several productivity indicators including supervisor rating scales related to job skills and instructional objectives. Discussions of assessment techniques will be followed by suggestions for how to analyze evaluation data.

Matching Evaluation to Program Goals

The Indiana Model program was a multi-strand workplace literacy program with several goals. A major program thrust was to improve learner literacy as broadly defined using Lytle's (1990) conceptual model of adult literacy change: Beliefs, Practices, Processes, Plans. This involved assessing changes in:

- beliefs about learners' own literacy;
- literacy practices at work and at home;
- literacy abilities and literacy processes and strategies employed by workers when reading and writing several types of workplace materials;
- plans for future educational and literacy activities.
Other program thrusts included improving learner productivity and performance with literacy on the job, improving qualifications for promotion, and improving the family literacy practices of a small group of parents.

With these program goals in mind, tests, interviews, questionnaires, and supervisor ratings were custom designed. In addition, absenteeism data and actual work samples were gathered before and after training.

**INSTRUMENTS**

To be able to evaluate the effectiveness of most programs, you should collect data related to program goals for each learner before and after training. The Indiana Model Workplace Literacy Program used a wide range of custom-designed measures constructed from actual workplace materials, but it is often desirable to use a mixture of standardized tests and such custom-designed measures.

**Standardized Tests**

Some workplace literacy programs have a goal of developing general literacy abilities as well as workplace specific literacy abilities. Since these two areas are somewhat related, but also different, it is a good idea to assess general abilities with a general measure. To identify the general reading abilities of learners, you may use one of several standardized tests. Two of the more commonly used measures are the Adult Basic Learning Education test (A.B.L.E.) or the Test of Adult Basic Education (T.A.B.E.). These tests often employ multiple-choice questions and short reading passages. Various levels of these tests range from very low literacy levels (i.e. early elementary grades) to material of high school difficulty level. Critics point out that these tests are very "school-like" and are inappropriate for programs which focus on specialized forms of adult reading (i.e. life skills activities and workplace reading). If a program is teaching general basic skills using school-like materials, a standardized test can assess improvement in general literacy abilities.
For program goals that are more specialized, however, it is best to use more specialized measures. For some goals, published tests are available, but in most cases some form of custom-designed measure is required. This is because the type of materials and literacy tasks one finds as one moves from occupation to occupation and workplace to workplace may differ considerably. A general measure is usually not sensitive enough to assess learner improvement in these specialized areas. Some research, for example, indicates that specialized workplace literacy training can help learners improve by the equivalent of several grade levels in ability to read workplace materials while revealing only a slight gain on tests of general reading ability. Conversely, general literacy programs can demonstrate gains on general tests and no gains at all on workplace specific activities (see Chapter 1). If you want to determine how workers use literacy in a particular workplace, it is best to use custom-designed measures.

Custom-Designed Measures for Literacy Gain

Among the available custom-designed measures to assess learner literacy gains are interviews, questionnaires, job-related reading scenarios and job-related cloze tests. Each of these will be discussed and presented with examples from the Indiana Model Workplace Literacy Program.

A research team directed by Larry Mikulecky at Indiana University has developed a series of interview and questionnaire items to assess changes in learner literacy beliefs, practices, processes and plans. These questions can be modified to fit the needs of particular workplaces. Learner answers before and after training programs provide indications of subtle changes in how learners perceive themselves, how they behave at work and home, and how they perceive their futures. Adults who learn only in classes and in the presence of teachers are unlikely to make much literacy improvement, since most adults cannot afford to be in class for anywhere near the thousands of hours a year that children spend in schools. For adult literacy programs to be effective, they must foster changes in adult perceptions and life-style which support continued literacy growth. If such changes do not occur, it is likely that classroom gains will disappear when adults leave classes. For this reason, it is important for programs to determine changes in adult beliefs, practices, processes and plans.
Beliefs

Interview questions can assess adult beliefs about what it means to be a literate adult and how literate adults perceive themselves to be.

Instrument Example:

- Describe someone you know who is very literate. What makes you think of this person as very literate?
- How literate do you consider yourself to be? What makes you think so?
- How literate do you think you might become?

It is not uncommon for learners in effective programs to have quite different answers to these questions after attending classes. Often pre-interviews reveal misconceptions about what it means to be literate, inaccurate self-judgments about one's own abilities, and only vague personal goals in relation to literacy. These areas can improve with effective instruction and should be noted in an effective program evaluation.

Practices

Similar open-ended interview questions can determine changes in learner literacy practices. These questions focus upon the amount and type of reading or writing performed by learners before and after literacy training.

Instrument Example:

- Tell me the sorts of things you read and write away from work during a normal week. (For probe, ask "Can you give me more examples?")
- Tell me the sorts of things you read and write on the job during a normal week. (Use probe above for more examples.)

Questionnaire items can also be designed and modified to assess improvement in learner literacy practices. What items are used in a questionnaire will differ from program to program.
instrument Example:

Sometimes reading is hard, sometimes easy. Please circle the kinds of reading you’ve done in the past month. Rate how you find the kinds of reading listed below.

<table>
<thead>
<tr>
<th>Reading Type</th>
<th>Easy</th>
<th>Hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>signs and posters</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>training materials</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>paycheck stubs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>cartoons</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>books</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>magazines</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>DOC training materials</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>daily logs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>advertisements</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>road maps</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

You can also question learners about the frequency of their literacy-related activities.

instrument Example:

- In the last 7 days how many times have you read a newspaper?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10+</th>
</tr>
</thead>
</table>

- How often do you make a shopping list before you go to the store?

  never  occasionally  often  always

- How many books are in your home, either owned or borrowed?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100+</th>
</tr>
</thead>
</table>

You can also ask learners to rate their literacy practices in workplace situations, such as departmental meetings, dealing with broken equipment, reading instruction manuals, or reading a health insurance policy.

instrument Example:

- When written information is handed out, you read it to see what it’s about.

  very like me 1 2 3 4 5 very unlike me
• You wait for others to talk about written information, just to be sure what is in it.
  very like me 1 2 3 4 5 very unlike me

• When you need to know something at work, you usually ask someone about it.
  very like me 1 2 3 4 5 very unlike me

• When paperwork comes from management, you often have trouble reading it.
  very like me 1 2 3 4 5 very unlike me

Abilities and Processes

In addition to beliefs and practices, it is important to determine changes in learners' workplace literacy abilities and the literacy processes they use when reading. Two custom-designed methods for assessing such changes involve using job literacy scenarios and developing cloze tests using job related materials.

Effective readers use a variety of sophisticated processes to read materials. These processes are often specialized (e.g. graph reading differs from memo reading). It is important to know the reading strategies and processes learners employ when reading work materials. Before and after training programs, effective evaluation can determine whether learners are employing sophisticated reading strategies (i.e. skimming, focussing, asking questions, etc.) and whether the choices and the uses of reading strategies improve as a result of training. The way to do this is to find workplace materials which are important and used regularly. These materials can be used to construct job scenarios which ask readers to describe orally how they go about reading the materials for specific purposes and then assess reading comprehension with factual, inference, and application questions.

Program Example: Some sample questions from job literacy scenarios from the workplace literacy program at the Indiana Women's Prison follow. These scenarios make use of the Adult Disciplinary Policy booklet used by employees, which includes a list of offenses that may be committed by prison inmates. This list is divided into Classes A, B, C and D according to the seriousness of the offenses, and a chart in the booklet shows the possible sanctions that can be given for offenses of each class.
Instrument Example:

Job Aid - Adult Disciplinary Policy

1. Show me how you would look at and use this book in your work. What do you look for? What is important?
   (Interviewer, write down information about what parts of the job aid are attended to. Also, note the ways the employee would go about using the job aid. What part of the booklet is skimmed, or read carefully? What process is actually used by the employee?)

2. Turn to page 37 of the booklet. I am going to read two statements of offenses. Locate the correct offense and code number in the booklet and tell me what they are. Do this as quickly as possible.
   a. Offender Smith hit Offender Jones.
      (Answer: #212 Fighting between two or more persons not involving the use or presence of weapons and/or when injury to any person does not occur.)
   b. Offender Smith mailed a letter to Offender Brown at W.C.I. after approval is denied.
      (Answer: #361 Unauthorized use or abuse of mail, telephones, or visiting.)

Rating (up to 3 points):
1 pt. - located quickly (30 sec. or less),
2 pts. - offense is written down accurately (correct offense cited and correct code number).

Charts

Look at the chart entitled "Guidelines for Imposition of Sanctions."
   (Page 34 of the Adult Disciplinary Policy.)

I am going to ask you some questions about it.
   (Interviewer, if answer is incorrect, ask learner to explain how they found the answer, and record the process.)

1. What would be the maximum loss of earned credit time for a Class C offense?
   (Answer: 3 months)

2. For which Class D sanctions are there no times listed?
   (Answer: 1. Reduction in credit class and 2. loss of earned credit time.)

Rating for 1 & 2:
5 pts. - correct answer
3 pts. - incorrect because reading from incorrect column or row
1 pt. - totally incorrect (wrong column and row)
0 pts. - no attempt

3. What is the most extra work time that can be given per day? Why do you think that is?
   (Answer: 4 hours)
4. What happens to the imposed sanctions as you move from a Class B to a Class A offense? Why do you think that is? (Answer: They increase.)

Rating for 3 & 4:
5 pts. - answer, explanation and illustrative examples
3 pts. - answer and explanation
   (e.g. 3. Total work time must not be excessive.
   4. Class A offenses are more serious.)
1 pt. - factual answer only
0 pts. - don't know, no idea

Other job-related scenarios can be developed from more traditional prose materials. In many workplaces, newsletters have multi-paragraph articles which employees are expected to read in order to keep up with current changes in the workplace. These articles can be used for more standard comprehension tests involving factual, inference, and application questions which parallel the questions in the scenarios above.

In addition to job literacy scenarios, job-related cloze tests can be developed to assess improvement in workplace reading ability. A cloze test is a fill-in-the-blank test, a short piece of text with every fifth word removed. Learners are to make their best guesses about correct words to fill in the blanks. Being able to replace 50% or more of the blanks indicates the ability to comprehend the passage independently, while being able to replace fewer than 35% of the blanks indicates material which is likely to give the reader a good deal of difficulty.

To design a job-related cloze test, select a representative prose passage of about 150 words from the materials gathered during the task analysis. Omit every fifth word from the passage, leaving the first and last sentences intact. You then have a cloze test containing about 25 blank spaces which learners are asked to fill in, using the surrounding context of sense and grammar. Make learners aware that nobody is ever expected to replace all the missing words correctly and that a score of 50% is considered quite good, so that they do not feel frustrated. You can actually tell learners at the test: “Don’t expect to get them all. Some are nearly impossible.” In addition, you might want to provide a practice example before the beginning of the test, since many learners have never taken a cloze test before and require guidance, such as “In a cloze exercise, you try
to guess which words are missing. For example, in the sentence below, a word is missing...” and an example follows.

Instrument Example:

Cloze Exercise
In a cloze exercise, you try to guess which words are missing. For example, in the sentence below, a word is missing.

She looked before she ________ the street.
A good guess for the missing word is "crossed."
She looked before she crossed the street.

In the story below, try to guess and replace the missing words. Don't expect to get them all. Some are nearly impossible.

OFFENDER FORMAL COUNT PROCEDURES

During formal count, all activities, movement and noise are to cease until advised by the staff that the count has cleared. When count is ________ by the Officers, the ________ each offender is responsible ________ adhering to, is as ________:

1) Offenders in their housing ________ are to be on ________ individual bed at the ________

(Passage continues for several more paragraphs)

Program Example: In the model project, the project director helped to select suitable passages for use in cloze tests. The tests were workplace literacy related, like the one above — about offender formal count procedures. Like the questionnaire, the cloze tests were conducted by the teacher during the class period.

Plans

Interview questions can be used to assess learners’ plans, especially in relation to education and goals requiring increased literacy abilities.

Instrument Example:

I'd like to ask you about your plans for the next year/ next 5 years/ next 10 years. Explain how you see reading and education as part of these plans.

Attending a workplace literacy class can often produce changes in the responses to such questions. Learners tend to become more
definite and detailed in their plans, and may have educational goals not mentioned in pre-interviews.

**ASSESSING THE PROGRAM'S IMPACT ON PRODUCTIVITY**

**Productivity Measures**

Impact on productivity is often an evaluation area you will need to measure in order to assess the results of training. What you would like to find out is whether learners' productivity has improved because of the training. One method is to compare a trained group or individual learners with untrained counterparts both before and after the training program to measure the change in quantity or quality. Another method is to compare learners' productivity before training to their productivity after training.

Indicators of productivity will differ as one moves from worksite to worksite. For example, some worksites may already keep records of individual productivity (i.e. defect rates, complaints, time to respond to customer requests, etc.) Unfortunately, such information is not available at all worksites. If it is difficult or inappropriate for you to collect precise productivity information (i.e. production and defect rates) about individual learners, you can try to gather other productivity-related information about them. For example, these are some factors that may be affected by a training program:

- retention and promotion
- absenteeism and punctuality
- accident rate
- use of suggestion boxes

Improvement in these areas may occur as a result of an effective training program. For instance, learners from an effective training program may become better motivated, show better performance, be more punctual or come to work more often, have lower accident rates, and feel more confident in using suggestion boxes.
**, Program Example:** In the model project, four factors were investigated to assess the program's impact on learners' productivity -- attendance, changes in job status, samples of employee written reports, and a survey of class participants.

Learners' attendance was recorded one month before class, during class, and one month after class in order to compare their attendance rates. Changes in job status served to indicate whether learners received promotion or greater responsibility as a result of the training program. Also, samples of learners' reports were collected before, during, and after class to determine whether their report writing skills had improved. In addition, a survey of class participants was conducted to discover changes of attitudes held towards report writing and improvements they had noticed in their own writing.

**Supervisor Ratings**

You can use supervisor ratings as another way to obtain information about the effect of training on learners. Working with supervisors, you can develop descriptions of job practices which are likely to be influenced by workplace literacy training. These descriptions can be converted to ratings which supervisors make on each employee before training and after training.

Obtaining supervisor help is essential. Because supervisors often spend much time correcting employees' mistakes and because they are likely to be the recipients of poor work, they know the performance of the employees well. How do you get help from supervisors? First, you can ask supervisors what job characteristics are most likely to result in high productivity. The following may be among the job characteristics described in your supervisor rating:

- taking responsibility for their own work
- having the initiative to solve problems as they occur
- communicating with other workers
- being committed to company goals
- setting up and operating machines
- keeping up-to-date with paperwork

For each characteristic, ask supervisors for precise descriptions of worker performance at low, average, and high levels. For example, descriptions for employees' paperwork could be like this:
Instrument Example:

Low: Paperwork provides no or limited information, is illegible, and in poor grammar.

Average: Paperwork is usually acceptable, but at times too brief or vague.

High: Paperwork is legible, detailed, clear, and concise.

Then you can put together a draft of supervisor rating scales with the information and descriptions you get from supervisors. Scales of five to ten behaviors are desirable. After your draft is done, bring it back to both supervisors and learners for them to give you feedback or suggestions. You may need to revise your draft after discussion with supervisors and learners.

The final rating scale for employees' paperwork can be constructed on a 1 to 10 continuum with the anchoring descriptions.

Instrument Example:

<table>
<thead>
<tr>
<th>paperwork provides no or limited info; illegible, poor grammar</th>
<th>paperwork usually acceptable; at times too brief or vague</th>
<th>paperwork is legible, detailed, clear &amp; concise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
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</tbody>
</table>

It is best to be with supervisors and to guide them in making assessments. Pilot testing indicated that problems occurred when some supervisors weren't regularly reminded to consider each employee carefully and to look at the behavior descriptions. When ratings are simply left on a supervisor's desk, there can be a temptation to rate an employee with the same score on all scales without careful consideration. Before each scale, ask the supervisor to read the descriptions and remind the supervisor that

- An average performance would be rated 5
- A top performance would be rated 8 or higher
- A bottom performance would be rated 2 or lower

Program Example: To better measure the impact the program had on productivity, several supervisors were involved in developing supervisor assessment in the model project. Custody and non-custody, past and present supervisors helped to rate
the reliability of the items for the supervisor assessment. Supervisors rated an employee in six different areas: initiative, knowledge of policy and procedure, attendance and punctuality, quality of work, paperwork, and attitude toward offenders. An employee's total rating could range from a low of six to a high of sixty.

**ASSESSING PROGRAM IMPACT BEYOND WORK**

What learners have gained from the training program may well be extended to influence their families indirectly. For those learners who are parents of young children, the training program can aid them in improving their own literacy levels while also helping their children at home. Actually, some programs incorporate family literacy into their courses or even as one of their training strands. Learners in these programs are taught either directly or indirectly how to improve literacy in their family.

To make a complete assessment of the training, you may choose to measure what literacy-related impact the program has on families of learners in addition to impact on learners as individuals.

Questionnaires and interviews are both good ways for you to learn about learners' family literacy. Research on family literacy suggests several areas to examine for impact. These are improved availability of literacy materials in the home, improved adult modeling of literacy, and more time spent with children in literacy-related activities. Questions of this sort can be asked of individuals in questionnaires, in individual interviews, or in focus group interviews involving 3 - 4 learners from a program strand.

**Instrument Example:**

- In the last 7 days how many times has your child looked at or read books or magazines?

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<th>4</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10+</th>
</tr>
</thead>
</table>

- In the last 7 days how many times has your child seen you reading or writing?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10+</th>
</tr>
</thead>
</table>
• In the last 7 days how many times have you read/looked at books with your child or listened to him/her read?

0 1 2 3 4 5 6 7 8 9 10+

• In the last 7 days how many times has your child printed, made letters, or written?

0 1 2 3 4 5 6 7 8 9 10+

• In the last month how many times have you bought or borrowed books for your child?

0 1 2 3 4 5 6 7 8 9 10+

In focus group interviews, learners can sometimes spur each others' memories about changes they have made. Some examples of focus group questions follow below.

Instrument Example:

• Do you have any new reading or writing materials at home? (i.e. letter blocks, flash cards, paper, pens, chalkboard, books, magazines, comics, cassettes with books, encyclopedia, dictionary, newspapers, etc.)

• At home, do your children see you doing any reading or writing? (i.e. books, magazines, papers, recipes, directions, letters, lists, notes, etc.)

• Have you started any reading or writing activities with your children? (i.e. visit library, hear stories, read to them, watch ed television, look at magazines or books with children, point out words to them, show them how to read or write, etc.)

Program Example: Family literacy was one of the training strands in the model project. In addition to a questionnaire about family literacy, there was also a family literacy focus group interview. In the interview, some learners with children were questioned about literacy beliefs and practices in the home. They were asked, for example, why they thought some children did better at school than others and what kinds of literacy-related materials they had available for their children. Questions used in the focus group interviews reflect categories developed by Fitzgerald, Spiegel and Cunningham (1991) in assessing home and parental factors related to children's success in school. In addition, the project director interviewed participants regularly to record actions and results. From these interviews it was possible to monitor increased literacy activity.
DATA ANALYSIS TECHNIQUES

Now that you have collected data of various forms before and after the program, your next step is to analyze the data you collected. You have probably used various instruments described above, ranging from multiple-choice to completely open-ended interview responses. The data analysis techniques you select should correspond to the instruments you used. For open-ended responses, there are two types of data analysis techniques: coding and categorizing the responses. Categorized responses can be discussed analytically using samples of actual pre and post comments of learners to demonstrate change. The same responses can also be given rating numbers (i.e. 1 = low, 3 = middle, 5 = high) and then analyzed statistically to demonstrate change. In cases where comments are converted to ratings, it is important to develop guidelines and descriptions for low, middle, and high, and to make sure that two raters can agree on ratings with a high level of consistency.

CONCLUSION

This chapter discussed how to evaluate the impact of the training program on learners as individuals, on learners' families, and on learners' productivity. It also presented instruments and methods you could use to collect data before and after training for impact assessment. Though standardized tests may be used in some cases, for most workplace literacy programs it is important to develop custom-designed instruments (i.e. interviews, questionnaires, job literacy scenarios, cloze tests, and supervisor rating scales).

Examples of instruments from the Indiana Model Workplace Literacy Program were provided. Data from custom-designed instruments can be analyzed and presented in a variety of ways. Further details about this are given in the addendum to this chapter, in which the results obtained at the Women's Prison are described.
Addendum to Chapter 6

Evaluation Results

OVERVIEW

Evaluation of instructional impact in the model workplace literacy program focused on changes in several areas. These were changes in learner:

- beliefs about literacy;
- literacy practices at home and work;
- literacy abilities and processes;
- literacy plans;
- productivity on the job.

In addition, special focus was given to literary activities for learners who were parents.

Pre-test and post-test results were compared statistically for the Report Writing, Promotions, and Family Literacy groups, on each aspect of measurement used. These results are summarized below and discussed in the remainder of this addendum.

Changes in Beliefs

- View of a literate person - no change
- View of self as literate - significant gains on most questions for Report Writing group; significant gains on some questions for Promotions class

Changes in Practices

- Reading and writing at work - significant gain for Report Writing group
- Reading and writing away from work - significant gain for one Report Writing class
Changes in Reported Reading Process and Comprehension

- Job-related cloze test - significant gains for Report Writing group and for Promotions class
- Prose reading process - significant gain in responses for one Report Writing class
- Job-related prose scenario questions - significant gains for Report Writing group, particularly on more difficult questions
- Job-related document scenario questions - significant gains for Report Writing group, particularly on more difficult questions
- Job aid scenario questions - significant gains for Report Writing group and for Promotions class, particularly on more difficult questions

Changes in Plans

- Plans for 5 and 10 years - significant gains in focus and literacy goals for Report Writing group and for Promotions class

Changes in Family Literacy

- Some increase in parent modeling and interactions with children for parents in family literacy strand

Changes in Meeting Employer Objectives

- Attendance - significant gain for one Report Writing class
- Supervisor ratings - significant gain for Report Writing class
- Report writing skills - significant gains for whole Report Writing group in test situation, and for one Report Writing class on sample of actual reports
- Promotions and Responsibility - substantial gains and good results in tests for Promotions class, and increased job responsibility for some members of Report Writing group
CLASSES

The classes held at the Indiana Women's Prison as part of the model workplace literacy program were:

- Report Writing 1 (April - June 1991)
- Promotions Support (July - August 1991)
- Report Writing 2 (September - December 1991)
- Family Literacy (September 1991 - January 1992)

The Report Writing classes each ran for 12 weeks, Promotions Support for six weeks, and the Family Literacy strand on an informal basis for four months. The numbers involved were 28 in Report Writing (17 in the first class and 11 in the second), 9 in Promotions Support, and 6 in Family Literacy.

The results of using the evaluation techniques described in Chapter 6 are outlined below in terms of the impact of the program in the areas of learner literacy, family literacy and employer objectives. Impact on learner literacy follows the Lytle (1990) model of "Beliefs, Practices, Process, and Plans". Productivity indicators used were Attendance and Supervisor Ratings, with Report Writing and Promotion data for appropriate groups. In all cases, post-test data were compared statistically with pre-test data in order to detect learner gains.

CHANGES IN LEARNER LITERACY

Changes in Beliefs

In response to the interview question "How literate do you consider yourself to be?", the Report Writing and Promotions groups showed a statistically significant improvement from pre- to post-test. This was measured in two ways. Responses to this open-ended question nearly always included spontaneously some kind of self-rating, using words such as "poor", "average", and "very literate", which was scored on a scale of 1 - 5. (The three examples just given would score 1, 3, and 5, respectively.) A holistic rating was also applied to the full response, in which change from pre-test to post-test was judged by the reported self-image and the reasons given for it. These changes were rated as negative, zero or positive. For
example, here are two learners' responses that received positive
ratings for the question:

How literate do you consider yourself to be?

**Pre:** "7th grade level. The world has changed since I got out -
at the time of graduation, I felt I could get what I
wanted."

**Post:** I'm literate on my job i., the best of my ability. I've
completed my tasks well and on time. I am complete
and consider the long-term."

**Pre:** "Average."

**Post:** "I'm very literate on the job that I do, because I know
everything I need to know about the job and I have
trained other officers."

Pre/post changes for the self-rating and the holistic scores were
statistically significant at the p<0.02 and p<0.0005 levels for the
Report Writing group. The holistic score was significant for the
Promotions class at the p<0.05 level.

Interviewees were also asked: "How literate do you think you
might become?" Responses were assessed holistically on whether the
learner mentioned future plans, how definite these were, and the
extent that reading and education were part of the plans. Here, the
Report Writing group showed significant gains, at the p<0.0001 level.
Example responses follow:

How literate do you think you might become?

**Pre:** "I could do a lot of improvement."

**Post:** "I hope more literate than I already am, so I can move
up and be a sergeant, then lieutenant, then captain
maybe. And I hope to gain more knowledge - this will
make me more literate."

**Pre:** "I would like to get better. I'm satisfactory now, but
would like to improve."

**Post:** "I want to give more attention to different things: to
helping my kids at home and being more attentive with
reports - more conscientious."
In the questionnaire, learners were asked to write down 4 or 5 words that described themselves as a reader and writer. These words were assessed as positive, neutral or negative in tone, and a score for each response was obtained by subtracting the negative total from the positive one. Both the Report Writing and Promotions groups gained significantly, at the p<0.05 level, in this measure of self-image.

Changes in Practices

Learners were questioned about their literacy practices, both at work and at home. Concerning work-related activities, they were asked in the interview to describe the kinds of reading and writing they had done recently at work, and in the questionnaire to rate on a scale from 1 (very like me) to 5 (very unlike me) a number of statements relating to contributions in meetings and the reading of work-related materials.

The interview responses were assessed by a count of items mentioned, and by holistic pre/post change judged by the breadth, frequency and difficulty of the reading mentioned. For the Report Writing group, although there was no significant change in the number of items mentioned, the adjudged quality of the reading increased significantly, at the p<0.05 level. There were no such significant changes for the Promotions class or, for either group, in the self-ratings on work-related statements.

The nature of the gains made by the Report Writing group is illustrated by these sample responses to interview questions.

Tell me the sorts of things you read and write on the job during a normal week.

Pre: "I read post orders, daily memos, logs, and DOC policy. I write incident reports, but write conduct reports less often. The last one I wrote was 5 months ago."
Post: "I look for things to read that are new - memos, anything with a state symbol. I read post orders and the rule book. I write conduct reports, incident reports, notes for myself and the log daily."
Pre: "Read post orders. Wrote report once only."
Post: "I read the newspaper (I used to read only comics), memos, post orders. I write incident reports, perimeter checks."

Pre: "Report writing, tracking charts, incident reports, daily log."
Post: "I write every day: charts, daily log, incident reports, use of caustic materials log. Offenders ask you to read a card, rule books, memos."

Learners were also asked in the interview to describe the reading and writing that they did away from work, and in the questionnaire to rate themselves on their frequency of doing several literacy-related activities and on their ownership of reading materials.

The interview responses were assessed by a count of items mentioned, and by holistic pre/post change judged by the breadth, frequency and difficulty of the reading mentioned (as described above for workplace reading). This showed a statistically significant increase in the quality of reading for the first Report Writing class, at the p<0.005 level. Comparable gains were not apparent for the second class, and no other measures showed significant changes.

In the questionnaire, learners were also presented with a list of 20 types of reading - some general (e.g. newspapers, books, bills, road maps) and some work-specific (e.g. DOC training materials, daily logs, incident reports, policy and procedure). They were asked to indicate which of the types they had read in the last month and to rate each on a scale from 1 (easy) to 5 (hard). None of the individual items showed significant change, but over half (11 of the 20 items) were rated by learners to have greater perceived difficulty. This may mean that learners were being more realistic in the post-assessment, after greater exposure to reading generally, or just that they were unable to apply the scale consistently over the time gap between pre- and post-test. For those not accustomed to using scoring schemes, there may be a problem in such assessment, particularly self-assessment.
Changes in Reported Reading Process and Comprehension

In the interview, workers were asked to respond to both process and content questions on job-related readings: a prose article, a chart, and a document. They were also given a cloze test constructed from workplace reading material.

The cloze tests used came from DOC training materials. The Report Writing group and the Promotions class made significant gains at the p<0.05 level on this reading measure.

When asked, in the interview, about how they went about reading a job-related prose article, the first Report Writing class made significant gains in number of responses (p<0.005), particularly in relation to strategies for selecting points of focus within the article. This reflects a more sophisticated approach to reading processes, which is illustrated by the following examples.

Explain to me how you would read this article. What would you do first, then next, then next?

Pre: "Look at the title. Glance over it. See the bold print. Start reading from top to bottom."
Post: "Read the heading. Read the first paragraph, which describes what it is. Read the body which contains this information. Supporting conclusions to support what is in the body. What action was taken. I would picture in my mind what was happening, when and where it happened, who was involved, how it happened."

Pre: "Read the title, then from top to bottom."
Post: "Look at the heading, then the author. Start with the first paragraph, then on down. Basically, what goes on here at the prison - i.e., an incident report. How this article fits into my report writing."

The two Report Writing classes were assessed with different scenarios, but questions about the content of the articles showed the same pattern: both classes made significant gains (p<0.01), particularly on more difficult questions that required inference or application from the reading. The Promotions class made no such gains. Their scores on the pre-test were already high, allowing little
room for improvement, and it appears that the scenario questions were too easy for this group.

The Report Writing group also made significant gains with a second scenario about a job-related chart \((p<0.0001)\), and with questions on a document about disciplinary offenses \((p<0.005)\). The Promotions class was not asked about the chart, but showed gains on the document scenario \((p<0.05)\). In all cases, the greatest gains occurred on the more difficult questions, which often required inferences to be made from the scenario materials.

Changes in Plans

When asked in the interview about their plans for the next 1, 5 and 10 years, both groups showed significant gains. Assessed on how definite and detailed the plans were and on the inclusion of literacy goals, the responses for 5 and 10 years were both significant for the Report Writing group \((p<0.0001 \text{ in each case})\) and for the Promotions class \((p<0.05 \text{ in each case})\).

I'd like to ask you about your plans for the next 5/10 years.

Pre: "I'm satisfied with whatever job - I'm settled."
Post: "I would like to be a professional person in some field - therapist or counselor, something to help people. I plan on going to school for the training."

Pre: "Counselor at another institution."
Post: "Hopefully in a larger institution as a counselor or officer, or take a promotion. I'd like to take more schooling."

Pre: "I'll be working in the same field, and will own my own home."
Post: "I'll be finished with schooling - with a law degree, working in legal aid or for the public defender or prosecutor's office. I would like to leave food service within this time, but I enjoy food service. I'm not sure I would ever leave this completely."
CHANGES IN FAMILY LITERACY

Questions about family literacy were asked of Report Writing 2 and the Promotions class in the questionnaire, but the number of parents responding was too small for analysis.

For the family literacy strand, the questionnaire was supplemented with interviews specifically related to this area. Although this group numbered only six, again not enough for statistical analysis, there is some evidence of an increase in parent modeling and in interaction with children, during the time that this group was meeting.

Four main areas were assessed for the family literacy strand: availability of literacy materials in the home, modeling by parents of literacy activities, parental literacy interaction with the child, and parental involvement at the child’s school. The quantity of literacy materials in the home showed little increase, at least partly because these parents already had many books and other materials available for their children. Changes in the extent of modeling activities was very variable, with four of the six participants changing little and the other two changing substantially. It is perhaps significant that the latter were the two parent leaders, responsible for coordinating activities with other parents in the group and so more committed to the success of this strand. Literacy interaction with children showed a moderate increase for five of the six participants, including increased time reading with children and discussing what had been read, and more visits to libraries. This appears to have been the most successful aspect of the strand, as far as changes in behavior are concerned. The extent of parental involvement at the child’s school was very variable, but on the whole showed little change.

CHANGES IN MEETING EMPLOYER OBJECTIVES

Attendance

For the Report Writing classes and the Promotions class, statistics for attendance at work were gathered for a month before each class started, during the period of the class, and for a month after class finished. The Report Writing class was compared with a control group for attendance. In addition, for the first Report Writing
class, there was sufficient time available to gather attendance figures for a one month period six months after the class had finished.

For the first Report Writing class, there were significant increases in attendance from the pre-class period to the class period (p<0.05), to the period immediately after class (p<0.005), and to the period six months later (p<0.05). The control group (of 10) showed a significant decrease over the pre- to post-class period (p<0.05).

Both the second Report Writing class and the Promotions class showed some decreases in attendance. This Report Writing class had a significant decrease (p<0.01) from pre- to during class, but its control group (of 9) also had a decrease, and the class and its control were not significantly different. The Promotions class had a significant decrease (p<0.05) from the pre- to post-class period. It is likely that time of year is a factor in attendance for these two classes, since they both ran from late summer into fall, whereas Report Writing 1 ran from spring into summer, which is a time of year less conducive to illness and absence.

Supervisor Ratings

The members of both the second Report Writing class and the Promotions class were rated by their supervisors on six job-related competencies before and after attending class. For the Report Writing class, these were Motivation, Dependability, Attendance, Quality, Paperwork and Offender Relations. For the Promotions class, Policy and Procedure was substituted for Dependability.

The second Report Writing class showed significant gains in overall score (p<0.05), and in the specific areas of work quality (p<0.05) and paperwork (p<0.01). The Promotions class showed no significant gains. It is worth noting that the most significant gain was obtained for the Report Writing class in an area specifically addressed by instruction.

There are difficulties attached to asking the immediate supervisor of an employee to make such ratings. It was evident in some cases that the ratings were done carelessly or that personal feelings toward the employee influenced the process. For some of these, it was possible for the project director to work through the rating scales with the supervisor, asking for the reasons behind a
particular rating and thus arrive at a more considered result. Since this was not always possible, these supervisor ratings need to be treated with some caution.

Report Writing Skills

The Report Writing classes were pre- and post-tested on their ability to write reports, by watching a video of a robbery and then writing a report on what they had seen and heard. A scoring scheme was used to assess their inclusion of full details on the Who, What, When and Where of the incident, as well as their clear and grammatical use of language. The group made significant gains in the areas: What (p<0.0001), When (p<0.0005) and Language (p<0.01), and in the total score (p<0.0001). Here are some sample extracts from these reports.

Pre: Police came and suspect fled.
Post: A blonde man in a jean jacket ran from the store. The clerk was right behind him, yelling "Stop him, he's got my money."

Pre: Suspect walked in, asked for cigarettes and pulled gun - demanded money.
Post: The clerk said the suspect had walked in and asked for a pack of Winston cigarettes. He then pulled a chrome plated gun and told the clerk to "give me all the money, no joke man!"

Pre: Police Officer flagged down by victim.
Post: As a police car pulled up to the Quick Pick Market, a man, later identified as Steve Strambuck, shouted at the policeman, "I've been robbed."

Pre: Suspect was advised of rights refused to talk.
Post: After suspect was apprehended, he was searched and read his rights.

Also, a sample of actual on-the-job reports was gathered for the Report Writing group, covering periods before, during and after each class. This sampling was somewhat uneven, because numbers of reports written fluctuate considerably depending on an officer's duties, these reports are difficult to retrieve from the filing system,
and they often pass through several revisions after their original writing by the officer. In an attempt to deal with these factors, the small number of reports written during the term of the class was discarded and comparison of pre- and post-reports was made in three ways: in the set of reports from one officer for one time period, separate analysis was made of the lowest scores, the highest scores and the mean scores. The scoring for these reports was done on a holistic basis, using criteria based on the more detailed scheme described above for the class test. With this method, the first Report Writing class showed significant gains on both lowest and mean scores (p<0.005), but the second class did not show significant gains.

In addition, a survey questionnaire was filled out by the members of Report Writing 1 six months after their class. In this, 15 out of 16 respondents said that they now found reports easier to write, and mentioned specific improvements in their ability to write them such as being more precise, writing shorter sentences, doing more planning and spending less time writing.

From the results obtained with the test video scenario and from the response to the survey, it appears that the Report Writing group made very significant gains in the ability to write a full and clear report. That this is not confirmed so strikingly by the sample of actual reports is probably due to the problems of multiple revision mentioned above. For example, it would have been possible to measure the impact of the classes more accurately if the sample reports had all been first drafts, the unaided work of the employees concerned. However, the nature of the institution's procedures did not allow this to occur.

Promotion and Responsibility

The Promotions class was principally concerned with preparing employees for tests set by the American Correctional Association, which count toward promotion opportunities, and the DOC Sergeants' Test.

An ACA open-book multiple choice test with 35 questions was used as a pre- and post-test by this class. Scores improved from a mean of 22 (with a range 15 - 26) to a mean of 34 (with a range 32 - 35), a very substantial gain. Also, in the actual test, which included essay questions as well, this group averaged 98.2% (with a range 96 -
100), compared with other test-takers at the same administration, who averaged 94.2% (with a range 82 - 100). These other results were seen by the test administrator as typical.

Five members of the Promotions class took the DOC Sergeants' Test. The scores for this test include an element based on job experience (30%), as well as the written examination (70%). All five class members passed the test (which requires 70%), obtaining a mean of 88 (with a range 84 - 95).

In addition to these results from the class explicitly aimed at promotion opportunities, those attending the first Report Writing class also made gains in this area over the six months following their training. Of the 16 respondents to the survey questionnaire, three had changed jobs to more responsible positions that involve more report writing. Although this cannot be attributed solely to the class, it is likely to be a factor in such moves.

**CONCLUSION**

Learners in the three strands of the model program (Report Writing, Promotions Support and Family Literacy) all made gains of some kind during their time in class. The gains for the Family Literacy participants were related to the specific nature of that strand, a support and discussion group focusing on the literacy of their children. The two class groups made gains, not only in literacy areas connected directly with their work, but also in other areas such as literacy beliefs and plans.

After attending class, both the Report Writing group and the Promotions class improved their image of themselves as literate and could make more detailed plans for the future. They also made some gains in literacy practices and processes, and made clear gains in their ability to answer more difficult scenario questions and in cloze test scores. Some improvements occurred in attendance and supervisor ratings, and report writing skills were definitely improved. A number of participants gained enhanced job status or were helped in their quest for promotion.

Thus it can be seen that this model program was of considerable benefit to those who took part in it, and that such a
workplace literacy program could be adopted by government departments and companies nation-wide, to the mutual advantage of both the institution and its employees.
Bibliography


APPENDIX A

SAMPLE TIME LINE

The following time line was constructed to illustrate the seven step development plan discussed in Chapter 2. This time line represents the technical training course in report writing, and estimates the amount of time needed to perform each of the seven steps. Time lines were also developed for the promotions support and family literacy strands. By devising time lines for each strand of your program, you will be able to consolidate information for better management.
<table>
<thead>
<tr>
<th>TECHNICAL TRAINING: REPORT WRITING COURSE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANALYZING JOB TASK</td>
</tr>
<tr>
<td>• Interviews</td>
</tr>
<tr>
<td>• Literacy Task Analysis</td>
</tr>
<tr>
<td>• Determine skills to be taught</td>
</tr>
<tr>
<td>• As needed</td>
</tr>
<tr>
<td>{Mar 1 - Apr 1}</td>
</tr>
<tr>
<td>{Mid Mar - Mid Apr}</td>
</tr>
<tr>
<td>RECRUITING STUDENTS</td>
</tr>
<tr>
<td>• Pay for attending</td>
</tr>
<tr>
<td>• Satisfies training hours</td>
</tr>
<tr>
<td>GATHERING BASE LINE DATA</td>
</tr>
<tr>
<td>• Learner needs &amp; abilities</td>
</tr>
<tr>
<td>• Job performance</td>
</tr>
<tr>
<td>• Previous reports</td>
</tr>
<tr>
<td>• Assessment materials</td>
</tr>
<tr>
<td>GATHERING SUPPLEMENTARY MATERIALS</td>
</tr>
<tr>
<td>• Published training materials</td>
</tr>
<tr>
<td>• Educational materials</td>
</tr>
<tr>
<td>DESIGNING INSTRUCTIONAL MATERIALS</td>
</tr>
<tr>
<td>• Handbooks</td>
</tr>
<tr>
<td>• Policies</td>
</tr>
<tr>
<td>• Scenarios for reports</td>
</tr>
<tr>
<td>DELIVERING INSTRUCTION</td>
</tr>
<tr>
<td>• 90 minute sessions</td>
</tr>
<tr>
<td>• 2 days per week</td>
</tr>
<tr>
<td>EVALUATING INSTRUCTION</td>
</tr>
<tr>
<td>• Compare to control group</td>
</tr>
<tr>
<td>• Retention (check after 2-3 mos. &amp; 6-7 mos.)</td>
</tr>
</tbody>
</table>
APPENDIX B

LITERACY TASK ANALYSIS

The literacy task analysis on the following pages was conducted at the Indiana Women's Prison. The targeted job was writing a conduct report for offender infractions. Project personnel identified five tasks within the job. Several literacy skills requiring reading, writing, and problem solving abilities were determined for each task.

The second portion of Appendix B addresses the indications for instruction and assessment you can derive from the literacy task analysis. Two literacy skills are listed accompanied by the possible lessons for the classroom.
**LITERACY TASK ANALYSIS**
**CORRECTIONAL OFFICER**

**Task:** Preparing a conduct report

<table>
<thead>
<tr>
<th>TASK DESCRIPTION</th>
<th>LITERACY SKILL APPLIED</th>
</tr>
</thead>
</table>
| 1. Enter offender name and number; institution; housing unit; date, approximate time, and place of incident; and date report is written on conduct report form. | 1-1 Locate offender data on desk copy.  
1-2 Enter information accurately on a form.  
1-3 Verify information from calendar, clock, desk copy, and locations chart. |

2. Use the policy and procedure manual to determine the name and code number of the offense.  

   | 2-1 Locate information in manual pertaining to infractions.  
   | 2-2 Recognize and comprehend technical vocabulary used to list infractions.  
   | 2-3 Apply knowledge of workplace policies to select infraction.  
   | 2-4 Scan section to locate correct infraction and code number. |
3. Write a narrative description of the incident.

3-1 Compose concise sentences summarizing the incident.

3-2 Sequence details of the incident.

3-3 Distinguish fact from opinion and include pertinent facts only in report.

3-4 Support the conclusion in the report by listing all actions taken by all parties and verify their compatibility with the infraction listed at the top of the form.

3-5 Compose sentences correctly using direct and/or indirect quotes, when applicable.

3-6 Employ standard English practices for mechanics and grammar usage.

3-7 Recognize and apply appropriate abbreviations.

4. If applicable, describe disposition of physical evidence and list witnesses.

4-1 Comprehend and apply instructions concerning the disposition of evidence.

4-2 Compose a clear description of evidence to attach to evidence.

4-3 Verify spelling and titles of witnesses and enter on form.
5. Secure appropriate signatures, proofread report, and submit report for the hearing process.

5-1 Apply knowledge of policy guidelines concerning signatures on reports and chain of command.

5-2 Review the narrative account of report to verify suitability of sentences in relation to the incident.

5-3 Apply spelling, grammar, and punctuation rules proficiently during proofreading.

5-4 Evaluate legibility of text.

5-5 Revise document as needed to meet acceptable guidelines.
LITERACY TASK ANALYSIS
INDICATIONS FOR INSTRUCTION AND ASSESSMENT

There are five tasks required to write a conduct report as shown in the literacy task analysis (LTA). Successfully performing any of the tasks requires applying the appropriate literacy skill and thinking strategies. You can use the data collected from the literacy task analysis to form a basis for curriculum and testing design for your classes. The literacy skill applications suggest lessons or tests to develop for your students. Following are literacy skill applications (taken from the LTA for conduct reports) paired with possible lesson topics. The chart below provides two examples from task #3: Write a narrative description of the incident.

<table>
<thead>
<tr>
<th>LITERACY SKILL APPLIED</th>
<th>POSSIBLE LESSON(S)</th>
</tr>
</thead>
</table>
| 3-1 Compose concise sentences summarizing the incident. | Identify long and unclear sentences from own previous reports. Practice rewriting them more concisely.  
Employ peer review techniques to identify long and unclear sentences and suggest possible revisions.  
Write summary statements of incidents. To simulate incidents use role play strategies, or verbal, video, or printed scenarios. |
| 3-6 Employ standard English practices for mechanics and grammar usage. | Proofread reports for specific grammar and mechanics rules (ie. use of past tense, subject-verb agreement, end punctuation)  
Practice proper use of mechanics and grammar by screening sample reports for errors. |
APPENDIX C

SAMPLE RECRUITMENT FORM

The recruitment form on the next page was used to register workers for the first report writing course. To make the information more appealing, the form was folded revealing a cover section which included the title of the program and the course and a graphic. The pamphlet was also copied on brightly colored paper to attract attention. Because this was the first course offered, much of the information in the handout described the personnel and objectives involved in the workplace literacy program.
**WORKFORCE EDUCATION**

The Indiana Women's Prison has been chosen as the model site for a new program. The Workforce Education Program will be offering several courses here for the next year. They are the first of their kind in the state.

The project director for Workforce Education is Denise Henard. Mrs. Henard will also teach the classes. She has been working with the staff at the Indiana Women's Prison to develop courses which you will find useful.

You can make a difference. Your involvement can help develop training for the future. This program is an important first step in state employee training. Because of this, you will be paid for attending classes.

Writing a report can be a challenge! To meet this challenge, "Report Writing" is the first course being offered. You are invited to sign up today.

**COURSE DESCRIPTION**

**WHAT: REPORT WRITING**

This course will help you improve your report writing skills. You will learn to write reports that are:
- clear
- complete
- concise
- correct

**WHEN:** Report Writing is a forty (40) hour course. We will meet each Tuesday and Thursday from April 9 to June 27.

Choose your class:
- Class 1: 1:30-3:00pm
- Class 2: 3:45-5:15pm

**YOU WILL BE PAID TO ATTEND THE CLASS.**

**WHERE:** Class will meet in the staff dining room.

**QUESTIONS:** You can sign up to take Report Writing today. Please fill out the registration form. Turn it in to your supervisor or bring it to the training office. Call ext. 296 if you have any questions.

---

### REPORT WRITING COURSE

<table>
<thead>
<tr>
<th>NAME</th>
<th>SHIFT</th>
<th>SUPERVISOR</th>
<th>CLASS TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>
APPENDIX D

CUSTOM DESIGNED CURRICULUM

This appendix consists of two samples of custom designed curriculum. Each lesson addresses a skill from the literacy task analysis.

Lesson #1: Writing a summary of an incident

For this lesson, class participants watched a video tape of a murder/robbery. The scenario was taped from a television show which simulates criminal action using actors. After watching the video, students were asked to write a summary of the incident using a guided format. The summary was written to include an introduction, body, and conclusion for the incident. The definitions for the introduction, body, and conclusion were adapted from a lesson developed by the American Correctional Association (Rosazza et al, 1991). Questions were developed by project personnel. The summary was written on the conduct report form used by the state. This lesson could be expanded to other lessons (ie. distinguishing fact from opinion, employing standard grammar and mechanics practices, or proofreading and revising written work).

Lesson #2: Applying knowledge of workplace policies and problem solving techniques

The objective of this lesson was to place participants in a situation and ask them to make appropriate decisions based on their knowledge and application of workplace policy. This was accomplished through role play. The type of role play enacted was an improvisation. The facilitator set the scene and provided short instructions for the group. Class participants were given background information on the situation. Next, they improvised their actions and comments depending on the role they assumed (officer, offender, or screening board). Finally, the group made decisions concerning the incident based on information they located in the state correctional policy. (In this case they were to decide what, if any, infraction had been committed.) In subsequent role play situations, participants were given infractions for which they were to improvise an incident.
Writing a Summary of an Incident

When you write a summary of an incident, you should organize your material in such a way that your reader can clearly understand it. Arrange information and paragraphs using an introduction, body, and conclusion format. The following headings, definitions and questions will help you organize the facts of today's incident.

Directions:
Watch the video once. Answer each question below the headings: Introduction, Body, and Conclusion. Watch the video a second time to verify your answers. Next, summarize the incident using your answers as a guide. Arrange your sentences in paragraphs to represent an introduction, body, and conclusion. Write the summary of the incident on the state conduct report form.

Introduction: A brief overview of who was involved, what occurred, and when and where it happened. The introduction is usually one or two sentences in length.

1. When and where did this incident take place?
2. Who was involved?
3. What happened to the victims?

Body: One or more paragraphs describing the facts of the incident in chronological order. All pertinent details are included in the body.

1. What were the employees doing when the suspect came into the store?
2. What did the suspect do to the employees after he entered the store?
3. What action did the gunman take after shooting his victims?
4. Describe the victims.
5. Describe the suspect.
Conclusion: Contains your unbiased summation of what happened. The conclusion is an ending paragraph or statement outlining the final actions taken.

1. What is the motive of the gunman?

2. What actions have the authorities taken to find the gunman?

3. What has the investigation of the crime revealed?
Developed by Denise Henard and Don Hipes

Applying Knowledge of Workplace Policies and Problem Solving Techniques Using Role Play

Role playing can help you learn to solve problems in the workplace. It also provides practice in sharpening your knowledge of procedures and policies by discussing how a situation should be handled and why it is handled a certain way.

The entire class will participate in this role play. The facilitator (known as the storyteller) will provide you with a situation. Members of the class will be asked to react to the situation from an officer's, offender's or screening board's point of view. Background information is provided for each person depending on the role they are assuming. After we have finished the role play, we will discuss our actions. We will locate the appropriate policy guidelines to support our decisions. As time permits, we will write a summary of this incident using the proper form.

Storyteller:

Please listen carefully to this story.

One afternoon last week (Tuesday, 1:30 p.m.), Officer Smith was on duty in the Education Building. Offender Jones came in the front door of the building carrying a pan of fudge. The following conversation took place:

Officer Smith: What do you have in that pan?
Offender Jones: This is fudge I made for the teacher who is retiring today. Several people are getting together to wish her a happy retirement.

Officer Smith: You are not allowed to bring food into this building. Take it back to your housing unit now.

Offender Jones: I talked to the education supervisor yesterday and he said it was OK with him if I made the fudge and brought it today.

Offender Jones then went down the hall to the classroom of the retiring teacher. There were several people there. They all had a good time and ate the fudge.
Officer Smith:

Officer Smith's regular post is the education building. The officer knows the standing policies concerning this area. Officer Smith did not see the education supervisor prior to this incident. As Officer Smith, you will tell us what actions you will take after the incident with Offender Jones. Tell the screening board (the audience) what you are thinking. Tell them what you said and did following this incident. Cite the section(s) in the Adult Disciplinary Policy on which you are basing your actions. Consider the following questions:

Did Offender Jones commit an infraction of the disciplinary policy?

If so, what is the infraction, and why?

How will you follow up this incident?

Offender Jones:

Offender Jones is angry that Officer Smith would dare question this situation. Jones thinks that no infraction was committed and is ready to speak to the screening board. As Offender Jones, prepare your defense for the screening board (the audience) and present it to them. Use your knowledge of disciplinary policies (by locating appropriate information concerning offender rights in the Adult Disciplinary Policy) to make a convincing argument.

The Screening Board:

The screening board is made up of the rest of the class. Their job is to listen to Officer Smith and Offender Jones. They can ask some questions of their own choosing, if needed. Based on the information outlined for the screening board in the Adult Disciplinary Policy and the actions of the officer and offender, each member of the board will offer a decision on this incident.
APPENDIX E

JOB AIDS

Job Aid #1: Restructuring information to make it more understandable to workers:

A section from the Adult Disciplinary Policy is displayed on the next page. The job aid which follows is an illustration of formatting information in a way that makes it easier for workers to use. The policy concerns the process involved in writing and submitting a certain type of report. There are several steps in this process and each one must be followed correctly for the report to be acceptable.

The job aid presents the information more clearly and sequentially by mapping it within a system of boxes. The boxes indicate the main tasks and sub-tasks which need to be accomplished. This type of job aid provides support as well as information for the worker.

Job Aid #2: Providing examples of acceptable work:

Some job aids, like the second example, break down a job into its sub-tasks and provide examples for each one. The example illustrates the essential components of the narrative portion of a conduct report. The examples describe each component (who, what, etc.) by giving instruction and following it with examples of correct and incorrect writing. Common errors seen on reports are illustrated by the poor examples. This job aid would be useful for an employee who is unfamiliar with writing reports or one who has skill problems with writing these types of sentences.
The following information was taken from the Indiana Department of Correction Adult Disciplinary Policy booklet, dated 1990. It is reprinted here with permission from the Indiana Department of Correction.

C. REPORTING VIOLATIONS

6. INFORMAL CONDUCT REPORT, STATE FORM 39589R:
   A. If an offender commits a Class "C" or "D" Disciplinary Code violation and admits responsibility for an action, an "Informal Conduct Report," State Form 39589R, may be prepared by an employee who witnesses or has reason to believe that a rule violation has occurred. (Such a report shall be completed within five (5) working days after knowledge of incident.)
   B. An "Informal Conduct Report" may be used only if the employee and offender acknowledge the agreement in writing.
   C. The "Informal Conduct Report" shall be approved by the shift supervisor or unit manager in order to be in effect. If the agreed upon sanction is approved, a "Conduct Report," State Form 39590, shall not be prepared.
   D. If the offender does not accept the disciplinary action or the shift supervisor or unit manager does not approve the agreed upon sanction, then a "Conduct Report," State Form 39590 may be completed and forwarded to the Institution Screening Officer for processing (see Procedure 8).
   E. The offender by accepting the sanction(s) waives the following:
      (1). Right to a hearing before a Screening Officer, Unit Team Disciplinary Committee, Conduct Adjustment Board or Hearing Officer.
      (2). Presentation of witnesses and other evidence.
      (3). Assistance of a lay advocate.
      (4). Impartial decision maker.
      (5). Confrontation and cross-examination of witnesses.
      (6). Findings of fact and appeal.
   F. Such a waiver shall be acknowledged in writing on "Informal Conduct Report," State Form 39589R.
   G. The sanctions which may be imposed pursuant to the "Informal Conduct Report" include extra work and/or restriction of privilege.
   H. An "Informal Conduct Report" shall be maintained until the sanction has been completed, then the report shall be destroyed.
   I. An "Informal Conduct Report" shall not be filed in the offender's institution pocket except when the offender fails to comply with the agreed upon sanction(s).
**Informal Conduct Report: State Form *39589R**

This procedure discusses the responsibilities of the employee and the options of the offender for Class C and D violations.

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Offender commits a Class C or D infraction.</td>
</tr>
</tbody>
</table>
| 2    | Reporting employee determines the sanction for violation.  
      | • restriction of privileges  
      | • extra work |
| 3    | Employee contacts the supervisor.  
      | The supervisor may:  
      | • approve the sanction suggested for violation  
      | • modify the suggested sanction |
| 4    | The employee offers the sanction to the offender.  
      | If the offender  
      | Agrees to the terms of the sanction  
      | Then...  
      | • Offender waives right to defense, hearing or appeal  
      | • Employee writes informal conduct report  
      | • Employee, supervisor and offender sign report  
      | • Offender serves sanction  
      | Does not agree or comply with sanction  
      | • Supervisor is notified  
      | • Employee writes a conduct report  
      | • Conduct report goes through review process |
| 5    | REPORT FORM  
      | Original reporting employee  
      | Yellow offender  
      | NOTE: Report is destroyed after sanction is served |

Developed by Denise Henard
CONDUCT REPORT

When an offender breaks a rule of the institution, you write a conduct report. Conduct reports must be written correctly. If not, they are returned to be rewritten or they are dismissed. It is necessary that conduct reports include these elements: when, where, who, what/how, why, and action taken. Please see the following examples.

WHEN: Enter the exact date in your report. List the approximate time to cover the range of time for the entire incident.

POOR
Tuesday, April 15
2:30

BETTER
April 15, 1991
approximately 2:30 p.m.

WHERE: Be specific when entering the exact location on your report.

POOR
Cottage A

BETTER
Cottage A day room

WHO: For each offender listed in your conduct report, list their full name and D.O.C. number. Check the correct spelling with the desk copy. Include the names and titles of any employees mentioned in your report.

POOR
Chris Gray
supervisor

BETTER
Offender Chris Gray, #44534
Captain Carl Smith

WHAT/HOW: Include all of the facts in sequential order when you discuss the incident. Use language that describes exactly what happened. If you list the actions in the order you observed them, how an incident took place will be clear.

POOR
The card table in the day room was knocked over. Gray was arguing with Jones and being belligerent. She knocked it over.

BETTER
Jones bumped into the table where Offender Gray was sitting. Jones and Gray started arguing. Gray overturned the table.
WHY: Use caution when including why an incident took place. Unless you have facts, leave the motive out of your report.

POOR
Offender Gray overturned the table. She has always been jealous of Jones.

BETTER
Offender Gray overturned the table.

ACTION TAKEN: To complete your report, include all actions that occurred during the incident.

POOR
Jones and Gray started arguing. Gray overturned the table.

BETTER
Jones and Gray started arguing. Gray overturned the table. I sent Offenders Jones and Gray to their cubicles. The supervisor, Captain Carl Smith, was notified.
On April 15, 1991, I, Officer Janet Johnson, was posted in the day room in Cottage A. At approximately 2:30 p.m., I observed Offender Mary Jones, DOC #78625, enter the day room.

Jones bumped into the card table where Offender Chris Gray, DOC #44534, was sitting. Offender Gray screamed, "Get out of my way!"

Jones and Gray started arguing. Gray overturned the table. I sent Offenders Jones and Gray to their cubicles. The supervisor, Captain Carl Smith, was notified.