DOCUMENT RESUME

ED 372 282 CE 066 912

AUTHOR	Jurmo, Paul
TITLE	Workplace Education: Stakeholders' Expectations, Practitioners' Responses, and the Role Evaluation Might Play.
INSTITUTION	Literacy Partnerships, East Brunswick, NJ.
SPONS AGENCY	National Inst. for Literacy, Washington, DC.
PUB DATE	Jun 94
CONTRACT	X257A20420
NOTE	120p.; For related documents, see CE 066 913-914.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Adult Basic Education; Basic Skills; *Evaluation Methods; Evaluation Needs; Evaluation Problems; *Evaluation Research; Evaluation Utilization; *Literacy Education; *Program Evaluation
IDENTIFIERS	*Workplace Literacy

ABSTRACT

This report focuses on the question of how to evaluate workplace education programs. Chapter 1 outlines the various purposes that those involved in workplace education programs have defined for workplace education and describes program models in place to meet those goals. Chapter 2 sets out three scenarios for evaluation at present: informal, internal monitoring; more formalized evaluation by outside evaluators; and more formalized internal evaluation by stakeholders. It then describes how the various components of evaluation process look within each one. Chapter 3 describes what a good evaluation looks like and the actions that should be taken to create meaningful evaluations. Chapter 4 describes workplace educators who have taken a lead in developing the collaborative approach and who are revising funding guidelines; developing new assessment, curriculum, and evaluation tools; creating new opportunities for staff development; and building a constituency for workplace education. It also describes others outside the workplace education field--literacy educators, social scientists, and organizational development and training specialists--who are developing tools of possible use to workplace literacy specialists. Chapter 5 discusses steps that stakeholders might take to support these new developments. (References are listed at the end of each chapter. Names and addresses of key organizations and individuals cited are appended.) (YLB)

WORKPLACE EDUCATION: STAKEHOLDERS' EXPECTATIONS, PRACTITIONERS' RESPONSES, AND THE ROLE EVALUATION MIGHT PLAY

Prepared June 1994
by
Paul Jurmo

This study was funded
by the
National Institute for Literacy,
Washington, D.C.

Grant Award #X257A20420

The views expressed in this document are those of the author and not necessarily those of the National Institute for Literacy.

Available from Literacy Partnerships, 14 Griffin Street, East Brunswick, NJ 08816-4806, Tel. 908/254-2237.

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ACKNOWLEDGEMENTS

For their help in the preparation of this document, I thank the following:

The National Institute for Literacy (NIFL), which provided funding for this study and a related handbook and series of case studies.

Laura Sperazi, co-director of this NIFL project and pioneer in much of the new thinking represented in this study.

Sue Folinsbee, another "pioneer" who gave valuable guidance from a Canadian perspective.

Others who provided information and feedback: Ira Baumgarten, Marilyn Gillespie, Susan Imel, Joanne Jones, Glenda Lewe, Nanette Brey Magnani, Muriel Medina, Jan Newman, Dolores Perin, Sharon Ramirez, David Rosen, Tony Sarmiento, Lee Shore, Sue Schurman, Wayne Werbel, and Carol Young.

Olga, Nicole, and Eric for their patience.

Paul Jurmo

Literacy Partnerships
14 Griffin Street
East Brunswick, NJ 08816-4806
908/254-2237

June 1994

EXECUTIVE SUMMARY

WORKPLACE EDUCATION: STAKEHOLDERS' EXPECTATIONS, PRACTITIONERS' RESPONSES, AND THE ROLE EVALUATION MIGHT PLAY

In 1993 and 1994, the National Institute for Literacy funded workplace education researchers Laura Sperazi and Paul Jurmo to refine a collaborative evaluation methodology for workplace basic skills programs. This study, prepared by Paul Jurmo, is one of three documents developed under that project.

Written for key stakeholders in the workplace education field, it provides an overview of (1) purposes for and approaches to workplace education; (2) how workplace literacy programs are evaluated; (3) strengths and needed improvements of current evaluation procedures; (4) recent attempts to develop a new, "collaborative" approach to workplace education, and (5) steps stakeholders can take to strengthen the field. As such, this document serves as a background piece to the other two project documents -- case studies and a guidebook -- which focus more directly on the "team" or "collaborative" approach to evaluation.

This study draws on literature from the workplace literacy field and related disciplines, and from interviews with workplace educators. Key findings are summarized below:

Workplace education: Stakeholders' expectations and providers' responses

Stakeholders in workplace basic education programs include learners, employers, unions, education providers, and funders. They have many expectations for workplace education. Some want to improve workers' abilities to perform specific job-related tasks. Some see education as one of many initiatives a workplace can undertake to (1) transform itself into a high-performance, continuous-improvement organization and (2) enable workers to be active participants in that transformation.

Some stakeholders hope education programs will help workers achieve more purely "academic" goals, improve their self-esteem and morale, or perform tasks important to them which may or may not be job-related. Some stakeholders look beyond individual workplaces and workers and see worker education projects as tools for developing the workplace education field or the larger economy and society.

Evaluators of workplace education programs need to understand what stakeholders hope to accomplish. They can thereby better understand who it is they are dealing with, avoid unproductive conflicts, and respond to stakeholders' legitimate concerns.

What evaluation currently looks like in workplace education programs

Research and policy papers state that evaluation should be an intrinsic part of all workplace education programs, to provide reliable information to those most concerned about program impact and needed improvements. In reality, however, programs have historically given relatively little attention to evaluation, focusing instead on providing direct services. They squeeze in informal internal monitoring when they can and, if the budget permits, hire an outside evaluator. Most recently, some programs have created internal evaluation teams which take responsibility for collecting, analyzing, and reporting information.

Strengths and needed improvements of current evaluation practice

A solid evaluation should respect stakeholder confidentiality; be seen as a positive, useful tool for making constructive decisions throughout the life of the program; and produce clear, reliable information about program impact and needed improvements. Evaluation should be guided by a spirit of inquiry, lifelong learning, and continuous improvement. Those involved need to understand not only evaluation itself but the special nature of workplace education. Audiences should use evaluation reports to refine funding guidelines, professional practice, and program goals.

Evaluators need, conversely, to avoid overlooking the information which stakeholders really want. Evaluations should not be an afterthought or seen as "for someone else." Evaluation should not be limited to "a test." Information should not be of dubious credibility, unclear, neglected, or unnecessarily negative in tone. Valuable findings should be disseminated widely to those who can learn from them. Workplace evaluations shouldn't oversimplify the relationship between literacy and productivity. Nor should they ignore the insights of practitioners, learners, supervisors, and others with valuable knowledge. And evaluations should not be given low priority and low funding.

Promising developments

Innovators in the workplace education field are developing new ways of evaluating workplace education programs and, with them, new forms of workplace education itself. Many of these innovations emphasize collaborative decision-making by stakeholders. Education programs are thereby more directly tied in with new ways of organizing work which emphasize teamwork and continuous improvement.

Within the workplace education field, some funders are now encouraging programs to follow collaborative decision-making principles. Practitioners are coordinating all program components in an integrated cycle characterized by continuous, collaborative decision-making. Stakeholders are being encouraged to first analyze the organization's overall human resource needs and policies before deciding whether to embark on an employee education initiative. Practitioners are creating new forms of individual assessment, curriculum development, and evaluation which put greater responsibility into the hands of program participants and other stakeholders. Practitioners are applying collaborative learning principles to their own professional development, by establishing peer-support systems.

In the related fields of adult literacy education, social sciences, and training and organizational development, innovators have developed assessment, evaluation, and program models which mirror many of the innovations being developed by workplace literacy educators.

Each of these disciplines might benefit from greater cross-fertilization with the others.

What we can do to develop appropriate evaluation practice

Key stakeholders in the workplace education field have much to learn from good work done to date and much work to do to develop the field further. Workplace educators, employers, unions, funders and policy makers, workers, and others need to study, clarify their values, develop action plans, build constituencies, get resources, do research and development, break down old barriers, and practice the collaborative learning and problem-solving we want workplaces to adopt.

INTRODUCTION

History, purposes, and audiences

This study was written as part of a larger project funded in 1993-1994 by the National Institute for Literacy (NIFL). The larger project was co-directed by Laura Sperazi and this author. The project built on prior work which the co-directors had carried out in workplace education programs in Massachusetts and elsewhere.

The project's goal was to provide a theoretical foundation and practical guidance for workplace educators looking for ways to improve the evaluation of workplace basic skills programs. In particular, the project presents arguments and practical steps for a "collaborative" or "team" approach to planning and evaluation.

This document focuses in particular on the "theory," the thinking which underlies not only the collaborative approach but other approaches to workplace education planning and evaluation. The author believes that anyone hoping to take on the task of creating evaluation relevant to this complex field should first have a working understanding of the thinking and models which already exist. In addition to laying out what already exists, this study in its last chapter also provides practical guidance for key stakeholders -- workplace education practitioners and researchers, employers, union representatives, and workers -- interested in "next steps," figuring out where to go from here.

Research questions and methodology

This study's five chapters are built around five discussion questions:

1. In the field of workplace basic skills education, what are the purposes which stakeholders set for programs and what approaches have practitioners developed in response?
2. What does "evaluation" currently consist of in workplace education programs?
3. What are strengths and needed improvements of workplace education evaluation to date?

4. What efforts are currently underway (in workplace education, adult literacy education, social sciences, and organizational development) to develop planning and evaluation methodologies which workplace educators might now learn from?
5. What actions might stakeholders in the workplace education field now take to strengthen how programs are planned and evaluated?

To respond to the five discussion questions, the author reviewed the literature on workplace basic skills education which has emerged since the late 1980s. He relied not only on "familiar" (commonly-cited) documents found in the ERIC database but on less-accessible conference presentations, minutes of meetings, and program evaluation reports solicited through an informal "grapevine" of workplace educators with whom the author has worked in recent years. He focused in particular on sources which dealt with the purposes of workplace education programs and the evaluation of those programs. He also interviewed a dozen practitioners and researchers in workplace education. In selecting his sources, the author attempted to present a representative sampling of the perspectives and models which currently exist.

For the first four research questions, relevant information was gathered from the above sources and compiled under those four questions. As this information was compiled, the author identified key themes. These themes became the framework for presenting the various ways the field has been responding to the first four research questions.

For the final research question, the author reflected on the information compiled for the first four questions and on his own experience, to map out possible steps which stakeholders might now take to improve how workplace education programs are planned and evaluated. He circulated a draft of the resulting report to a half-dozen reviewers. He then incorporated their feedback into the final report.

The author provides some answers to the five research questions. He hopes that readers will, in turn, develop their own answers to these questions and add them to the healthy dialogue our field now needs.

Chapter 1

WORKPLACE EDUCATION: STAKEHOLDERS' EXPECTATIONS AND PROVIDERS' RESPONSES

Stakeholders in workplace basic education programs include learners, employers, unions, education providers, and funders. They have many expectations for workplace education. Some want to improve workers' abilities to perform specific job-related tasks. Some see education as one of many initiatives a workplace can undertake to (1) transform itself into a high-performance, continuous-improvement organization and (2) enable workers to be active participants in that transformation.

Some stakeholders hope education programs will help workers achieve more purely "academic" goals, improve their self-esteem and morale, or perform tasks important to them which may or may not be job-related. Some stakeholders look beyond individual workplaces and workers and see worker education projects as tools for developing the workplace education field or the larger economy and society.

Evaluators of workplace education programs need to understand what stakeholders hope to accomplish. They can thereby better understand who it is they are dealing with, avoid unproductive conflicts, and respond to stakeholders' legitimate concerns.

"Functional context" and other perspectives

In their 1992 review of literature on workplace literacy education, Susan Imel and Sandra Kerka identified two purposes for employee basic skills programs. Since the mid-1980s, workplace education tended to be seen as a means of helping employees perform particular "high-priority job tasks as determined by management" (Imel and Kerka, 1992, p. 4). More recently, however, some in the field have conceived of programs as a means of changing not just "the behavior of individual employees but of the larger work organization as well" (Imel and Kerka, 1992, p. 4). In this new view, workplace basic skills programs should "reinforce the critical thinking and teamwork required to transform workplaces into high-performance, continuous improvement organizations" (Imel and Kerka, 1992, p.8).

These categories represent two important ways of looking at workplace education. The former perspective -- commonly referred to as the "functional context" approach -- has guided U.S. federal funding for workplace literacy programs; it shaped public thinking in the rush of media coverage given to workplace literacy in the late 1980s; and it became the standard against which many programs measured themselves. The latter perspective -- which we will call the "collaborative" approach -- is more recent, but it appears to be attracting increasing support from those linking workplace education to more collaborative ways of organizing work.

These two categories don't, however, capture other goals which stakeholders have set for worker education. These other goals include more-traditional "academic" objectives, increased learner self-esteem, learner-defined contextualized uses of literacy on and off the job, development of the workplace education field itself, and economic and social development.

This report focuses on the question of how to evaluate workplace education programs. In any such discussion, it is important to first understand what those involved in the program hope the program will achieve before we can determine whether it in fact has achieved the intended outcomes.

To clarify the options open to programs, outlined below are the various purposes which those involved in workplace education programs -- researchers, funders, employers, unions, educators, and program participants -- have been defining for workplace education. Also described are program models which have been put in place to meet those goals.

Improving individual worker performance of specific job tasks

Project Literacy U.S. -- commonly called the "PLUS Campaign" was a collaboration of the ABC and PBS television networks which began in the mid-1980s and, with varying focal points, has continued until this time. Its original purpose was to focus the public's attention on the adult literacy issue (although in more recent years it has shifted its focus to youth). In its second year, it focused in particular on workplace literacy. The campaign fueled the creation of "business breakfasts;" governors' task forces; intensified coverage in the print media; state and federal workplace literacy initiatives; and special pilot projects of trade associations in the banking, printing, textile, and home building industries.

These workplace literacy activities were supported by the Business Council for Effective Literacy (an organization set up specifically to foster corporate involvement in adult literacy efforts) and by other business-oriented organizations like the American Society for Training and Development, the National Alliance of Business, the Society for Human Resources Management, the American Newspaper Publishers Association, and the American Management Association.

These initiatives generally emphasized the impact of illiteracy on the "bottom line" of companies. To counter American workers' perceived skills deficits, companies were urged to invest in workplace education programs which helped workers strengthen the basic communications skills they needed to perform their current jobs and possibly future jobs.

This focus on specific job skills was based on research done in workplace literacy programs -- much of it carried out in the military -- where improved job performance was the stated goal. Proponents of this job-specific approach -- which came to be referred to as the "functional context" approach -- argued that it is simply more efficient to teach people the skills they need to use on a day-to-day basis and then let them practice those skills in their day-to-day work (Sticht, 1987).

They contrasted job-specific instruction with what they termed "general" literacy instruction, the teaching of abstract, de-contextualized skills traditionally done in formal schools. Functional context advocates said that "general literacy" programs are inappropriate for workplace settings because they were based on a logic developed for children in school: teach abstract "skills" divorced from real, meaningful application with the hope that -- somehow, someday -- the learners will be able to transfer those skills to real applications (Secretary's Commission on Achieving Necessary Skills, 1991).

The arguments presented by advocates for a job-specific focus are summarized below (Mikulecky and Lloyd, 1993):

1. "Research": Research shows learners learn best through regular practice of real applications to serve meaningful purposes in real contexts. "General literacy" is either not grounded in any context or focuses on contexts which are not relevant in a workplace.

2. "Practicality": Given the miniscule instructional time available in most workplace programs, learners must focus on high-priority, attainable learning objectives, which they can reinforce through practice in their daily work lives. "General literacy" is too unfocused, trying to cover too many objectives.

3. "Politics": To convince employers to invest in education, we must show that their bottom line economic interests are served. "General literacy" programs don't sufficiently improve job performance to justify investments in them.

The new attention to workplace literacy created a demand for literacy practitioners able to operate workplace programs. Few had set up workplace literacy programs before. Those who had tended to follow more traditional, academic models which used the general literacy approach described above.

The arguments for a functional context approach seemed reasonable, and newcomers wanted practical guidance on "how to do it." They turned to the pioneers of the functional context approach for help. Several manuals showing how to set up workplace literacy programs received wide circulation (Business Council for Effective Literacy, 1987; Carnevale, Gainer, and Meltzer, 1990b; Philippi, 1991; U.S. Department of Labor and U.S. Department of Education, 1988). The functional context approach was further disseminated in popular workshops all over the country.

Practitioners hungry for practical, "how to" guidance gave special attention to the question of how to do a literacy task analysis (also known as "a literacy audit"). Although the details of how to do an "LTA" varied from practitioner to practitioner and site to site, the LTA process tended to have these characteristics (Philippi, 1988, 1991):

Decisions made primarily by education specialists and managers: It is assumed that programs will focus on job tasks identified by employers as being critical to job performance. Education specialists then do most of the work of investigating those jobs and workers' abilities to perform them and then developing a curriculum to fill in the gaps between job demands and worker skills

Most decisions made during a single period prior to implementation of instruction: Needs analysis and curriculum design work are done primarily before the program gets under way.

Emphasis on breaking down jobs into tasks and skills: The LTA process breaks jobs into tasks, which are then sequenced and prioritized by difficulty and frequency of use. Tasks are then further broken down into steps, substeps, and single behaviors. For each task, the required cognitive reading process and concepts required for successful performance are identified. These become focal points -- learning objectives -- for instruction. Instructional activities are further categorized by ability level, time required, and other parameters.

Emphasis on helping learners locate and use information developed by others: The LTA focuses heavily on reading tasks in which the worker locates or uses information imbedded in job documents developed by others.

In the mid-1980s, the U.S. Department of Education adopted the functional context approach, promoting it in the Department's The Bottom Line workplace literacy handbook. The legislation which created the Department's National Workplace Literacy Program stated the broad goal that funded projects should "improve the productivity of the workforce through improvement of literacy skills needed in the workplace." The Department interpreted this to mean that funded projects follow the functional context job-specific methodology. As the largest single source of funds for the field, the Department thereby made "functional context" the criterion against which the field measured itself

(Sarmiento, 1993; Schultz, 1992; U.S. Department of Education, May 1992).

Helping organizations shift toward high-performance teams

Emerging in the early 1990s came a different interpretation of "the workplace context," "employee basic skills," and how to create employee basic skills programs relevant to the emerging workplace context. This view held that a new workplace was evolving in which workers need to be able to perform a wide variety of jobs, to be able to make decisions, to communicate with many different people for various purposes, to take initiative and solve problems, and to work in teams. This kind of role was seen as significantly different from what was expected of workers in more-traditional, top-down, assembly-line types of jobs. In the "old" workplace, workers were expected to repetitively do the same tasks over and over, not ask questions, follow orders given by others further up the decision-making hierarchy, and not take too much initiative.

"Basic skills" in the old workplace often was seen as reading information and directions developed by others and solving problems as interpreted by others in the context of relatively static jobs. In the new workplace, "basic skills" essentially meant the ability to create new knowledge -- a new understanding of workplace needs -- and then use that knowledge to continually improve how work is done.

According to this emerging view, workplace education programs should help workers develop those new kinds of skills and a mindset which values continuous self-improvement, improvement of the organization, and active, collaborative problem-solving. Education programs should themselves be organized along the lines of the collaborative decision-making processes used in the new workplace (Jurmo, 1994; Sarmiento, 1991; Pritz and Imel, 1993; Schultz, 1992; Stein, 1993).

Like the "functional context" proponents who preceded them, advocates of this alternative approach were, on one hand, reacting against an existing approach (that is, the functional context approach) while building on their own experience trying to develop practice meaningful in workplace contexts. In this case, the workplace contexts they were most interested in working in differed from the more traditional workplaces in which functional context programs evolved.

Those advocating an instructional approach tied more directly into transforming workplace cultures came from several sources:

Educators who had tried the functional context approach and found it too limiting: One of the positive outcomes of the workplace literacy pilot projects funded by the federal government and other sources was experience which showed what approaches seemed to work in particular contexts -- and which didn't. Some practitioners who had tried the functional context approach emerged from that experience saying they felt constrained trying to teach particular skills which -- especially in the rapidly changing workplace -- were soon irrelevant if they were ever relevant at all. Many of these practitioners also came from whole language, community based, and other literacy education backgrounds which emphasized active learner involvement in curriculum design (Gowen, 1992; Jurmo, 1991; Pritz and Imel, 1993).

Schultz, for example, states that the functional context approach and its heavy reliance on LTAs, have

> . . . become axiomatic with workplace education programs. What is striking about literacy audits is that they almost always lead to lists of skills and subskills rather than to a broader understanding of teaching and learning literate practices. Furthermore, and perhaps even more importantly, the dominant ideology which supports this single way of conceptualizing the curriculum necessarily limits the possibilities for teaching and learning in these programs . . . These ways of describing teaching and learning, and of describing teachers and learners reinforce an essentially Tayloristic view of work, a perspective which advocates a system of mass production based on breaking work into its smallest and most basic elements and defining jobs narrowly so that they are relatively easy to learn. Thus, while U.S. companies are introducing new forms of work organization, with new participation structures and patterns of interaction, many are choosing to teach and

evaluate their employees with traditional methods. Reorganized companies are asking workers to become active learners in the workplace and passive students in the classroom. The reorganization of work and workplaces calls for new conceptions of teaching and learning as active, constructive process rather than the transmission of skills (Schultz, 1992, pp. iv-v).

A report from a 1992 close-out conference of NWLP project directors contains a similar quotation from one director:

> The rigid view of job-specific curriculum development held by many leaders in workplace literacy is dangerous. Job-specific curriculum development makes sense because it utilizes the concept of integrating prior knowledge into instructional design. The danger, however, lies in the belief that it is the only way to develop good curriculum. This rigid view is based on a small amount of research conducted by a few people who have done adequate research, but with a very, very narrow focus. The need for funding more research in what works in workplace literacy is crucial (Evaluation Research, 1992, Appendix A).

<u>Those calling for greater quality of work life for workers</u>: The shift toward participatory decision-making in workplaces didn't, as many might assume, begin with the Total Quality Management (TQM) movement which emerged in the 1980s. Employee involvement was a foundation stone of the "quality of work life" (QWL) movement of the 1970s which first began reshaping how people thought work should be done. The QWL movement put a special emphasis on making work more rewarding for workers, in terms of reimbursement, benefits, equal opportunity, as well as general job satisfaction.

Although QWL as a concept became overshadowed in the 1980s as the TQM movement presented employee involvement as a means of "improving the bottom line," it nonetheless has remained a motivation for many now involved in trying to shift workplaces toward a "high performance" model. That includes many of those calling for a more-participatory approach to worker education. They argue that education which prepares workers for the more-active decision-making roles expected of them in the new workplace not only can make for a technically more efficient workplace but one which ensures for them a greater quality of life on and off the job (Sarmiento and Kay, 1990; Sarmiento and Schurman, 1992; Schurman, 1993).

As Stein (May 1993) points out, however, worker involvement and a continous improvement ethic don't automatically guarantee workers job security. Efforts to transform workplaces along high performance lines must include a commitment to equity and justice for workers, as well.

<u>Those who see education as a way of producing "high performance," productive, and competitive workplaces</u>: As the 1980s came to a close, there was an explosion of books and articles arguing that, if U.S. business was to regain its competitive edge and head off economic and social disaster, it must re-organize the way work is done. Businesses should transform themselves and become "high-performance work organizations" guided by a "continuous improvement" ethic and total quality management principles. This new way of viewing work was to place high value on active worker participation in collaborative decision-making, flattened hierarchies, greater labor-management cooperation, commitment to ongoing learning, and other innovations (Tomasko, 1993). Education and training were seen as vital elements of such organizations (Aubrey and Felkins, 1988; Berger, Dertouzos, Lester, Solow, and Thurow, 1989; Carnevale, Gainer, & Meltzer, 1990a; Commission on the Skills of the American Workforce, 1990; U.S. Congress, 1990).

Senge argues that, if companies truly want to transform themselves in a high performance direction, they must become "learning organizations." In such a workplace, "personal learning and organizational learning" are connected, there are "reciprocal commitments between individual and organization" and there is a "special spirit of an enterprise made up of learners" (p.8). Senge argues that "team learning is vital because teams, not individuals, are the fundamental learning unit in modern organizations" (p.8). He says: "The discipline of team learning starts with 'dialogue,' the capacity of members of a team to suspend assumptions and enter into a genuine 'thinking together'" (p.8). "A learning organization is a place where people are continually discovering how they create their reality. And how they can change it" (p.12).

He contrasts this "decentralized, nonhierarchical organization dedicated to the well-being and growth of employees as well as to success" (p. 15) with "traditional authoritarian 'controlling organizations'" (p.5). Under the traditional system, "we are taught to break apart problems, to fragment the world. This apparently makes complex tasks and subjects more manageable, but we pay a hidden, enormous price. We can no longer see the consequences of our actions; we lose our intrinsic sense of connection to a larger whole" (p.1). The result is "our inability to grasp and manage the increasingly complex systems of our world" (p. 14).

A few sources have focused more specifically on where basic skills education might fit into this new way of organizing work. Sarmiento (1991, p. 2) states:

> Planning a workplace literacy program in a "high skill," high performance work organization is unlikely to be a top-down, prescriptive process. Instead, basic skills problems are recognized and handled through the same participatory process and structure that exists in the workplace to identify and solve other kinds of problems related to production or labor-management issues.

He contrasts such a program to one operating in a traditional, top-down, "Tayloristic" workplace where

> . . . workplace literacy programs can be designed to develop a dispensable, disposable workforce to meet the low literacy and job skill demands of an employer pursuing scientific management principles and the "low wage" path (Sarmiento, 1991, p. 3).

Similarly, Stein and Sperazi (1991, pp. 1-3) contrast worker education in traditional and high performance workplaces. In traditional workplaces, the

> . . . company does not have a long term strategy that integrates education and training into an overall business plan . . . goals for education and training are short-term,

problem-centered . . . (there is a) presumed conflict between education and production . . . top management is not invested in the program's goals . . . neither workers, supervisors, or unions are involved in planning, implementing, and evaluating the program . . . decisions on what and whom to teach are based on an audit of job task specific deficits . . . testing is separate from instruction . . . content of instruction tends to be narrowly job specific . . . and there are no plans for institutionalization of program.

Stein argues that education and learning be seen as intrinsic parts of any high performance organization, rather than as something tacked on to get a company through a crisis. She describes one workplace education program which has evolved from a focus on life skills to a focus on job-specfic content and, finally, to a focus on continuous improvement tools. The ESL instructor is now training workers to serve as peer-teachers of fellow workers out on the shop floor, thereby reinforcing the notion that learning occurs every day in every aspect of work, not just in the classroom. She argues that we should be looking at the natural ways people learn on the job -- typically in colaboration with more-experienced co-workers -- and help workers use those existing, everyday, natural learning processes rather than trying to fit workers into a traditional classroom model. In this alternative model, we would

> . . . expand the walls of our classroom, to see the workplace itself as the classroom and our role as teachers to facilitate the learning that is going on thoughout it, to make what we do part of the action, part of the process of continuous improvement (Stein, May 1993, p. 7).

Hull (1991) cites ethnographic research on how people naturally help each other with literacy tasks in workplace and other environments. She suggests an "apprenticeship" model of learning in which

> . . . workers who need to carry out a task involving complex literacy skills learn on the job with someone who can already perform that task . . . rather than assuming that structures and practices for learning literacy must be

imported from school-based models of teaching and learning, we might do well to study workplaces and communities to see what kinds of indigenous structures and practices might be supported and built upon (pp. 28-29).

A growing number of workplace educators are currently moving beyond the level of theory and developing programs which reflect the above collaborative learning principles. Their efforts are described under "Promising Developments" in Chapter 4 of this report. These practitioners cite the following kinds of principles:

- Workplace education efforts should promote the development of workplaces which are both efficient and characterized by a high quality of work life for all employees.

- Learners focus on understanding and shaping the larger organization and less on mastering discrete tasks and information developed by others.

- Learners develop skills and knowledge they can apply not only to the workplace but to other contexts, as well. This is done for two reasons. It encourages learners to strengthen their skills through continuous practice in many meaningful daily contexts. It also prepares workers to participate actively both within and outside the workplace, thereby contributing to the creation of a stronger and more democratic economy and society.

- Instructional content and format are flexible, continually revised in response to needs and opportunities identified by stakeholders.

- All stakeholders -- especially learners -- have responsibility for deciding content and format of program activities. Special procedures are established to enable all stakeholders to participate actively in decision-making.

- Improving employee basic skills is seen as one component of a long-term strategy for changing the larger organizational culture.

• All program elements are linked together (not piecemeal) and managed via a collaborative decision-making process involving all stakeholders.

• Learners are encouraged to use the skills they are developing, and stakeholders make changes in the workplace necessary to enable learners to do so.

• Emphasis is on helping learners create knowledge and communicate it rather than merely using information developed by others.

• All stakeholders are invested in developing the potential of the entire workforce (not just managers).

• Education is seen as a means -- not an obstacle -- to improved job performance.

• Individual assessment is integrated into instruction and results are used in a confidential, non-threatening way.

• Outcomes are measured in terms of changes not only in individual workers but in the organization as a whole.

• The dignity and diversity of all stakeholders is respected (no "bashing" of anyone).

• Stakeholders avoid focusing on "deficits."

• Education efforts borrow from those involved in work re-organization, adult education, and other fields.

Helping workers to achieve academic goals

Some stakeholders -- including employers, union representatives, potential and actual participants, and educators -- take what might be considered a fairly traditional, "academic" view. They think that workers should concentrate on developing their basic abilities in the 3Rs and perhaps earn their GEDs. With such a foundation of basic academic skills, participants will then presumably be able to better handle the tasks they face on and off the job. The emphasis in this case is not so much on immediate improvements in job performance as on providing workers with an educational benefit which they might use to improve their job performance or their lives in general. Such a perspective is often made by those who think of "literacy" as the 3Rs learned in school or who are unaware of -- or don't buy into -- the arguments for a more-contextualized approach to adult literacy instruction.

This perspective on what programs should achieve is essentially the "general literacy" approach rejected by "functional context" proponents. In an informal survey of workplace literacy programs taken in the mid-1980s, the Business Council for Effective Literacy found that most programs at that time took this approach. As stated under "functional context" above, U.S. programs have since that time been required by some funders to adopt a functional context approach, despite the fact that many stakeholders -- especially learners -- ask for the workbooks, vocabulary drills, and other "academic type" activities they are familiar with from their school days (Gowen, 1992; Jurmo, November 23,1993; Medina, 1993; Soifer, Irwin, Crumrine, Honzaki, Simmons, & Young, 1990; Young, 1993).

In Canada, workplace educators have felt freer to use a wider range of instructional activities -- including GED preparation and other curricula not directly job-related -- possibly because the "functional context" approach has not been so heavily promoted as in the U.S. (Garlick-Griffin, 1993).

Improving worker self-esteem and morale

Some stakeholders -- including many employers -- think programs should focus on building learner "self-esteem," their sense of self-worth. They argue that low-literate workers deserve a second chance at attaining the sense of self-worth which comes from having a sound education (Draper, 1991). It is often assumed that, in addition to helping the workers grow as individuals, improved self-worth might also have a positive impact on learners' job-performance. For example, learners might be more willing to participate in training activities, communicate with fellow workers, and try for promotions. A 1992 report from the U.S. Department of Education captured this perspective in a quotation from a workplace educator:

> A year ago Tom had little confidence in himself and no pride in his appearance or work. As a result of the success he experienced in training, he's become highly productive and takes pride in his work. His entire appearance and demeanor have changed, too. With his new-found confidence and self-esteem, he takes advantage of every in-house training opportunity placed in front of him (U.S. Department of Education, 1992, p.8).

"Improved self-esteem" has sometimes been denigrated as too soft a benefit to measure and not tangible enough to warrant private or public funding. This is despite the fact that employers often cite this as a goal when asked what they hope an education program might accomplish (Garlick-Griffin, 1993; Jurmo, November 20,1993; Jurmo, November 23, 1993; Program Planning Consultant Group, 1992).

Some research supports increased self-esteem as a goal in and of itself, however. In this case, self-esteem is defined more in terms of a sense of "self-efficacy," a belief that one can succeed and that it's worth making the effort to try something new. Without such a sense of self-efficacy, this research suggests, a worker is unlikely to either benefit from an education program or be willing to participate in any other activity aimed at improving the workplace and his place in it.

> Adults with a negative impression of their own abilities are not likely to attempt literacy away from the supportive environment of a classroom and nurturing instructor . . . (Learners) need to see themselves as capable of attempting more literacy and practicing more on their own, as opposed to avoiding literacy tasks and literacy practice (Mikulecky and Lloyd, 1993, p. 83).

Many programs recognize this and intentionally try to build learner self-esteem (Soifer, Young, & Irwin, 1989). One program points out, however, that reinforcing learner self-confidence must be built into every program activity, by showing respect, listening to what learners have to say, and building on their knowledge. This perspective on self-esteem was central to the program developed by Eastern Michigan University, the United Auto Workers, and Ford Motor Company at the Ford plant in Ypsilanti, Michigan:

The workers develop self-confidence when they see that their own knowledge and interests are valuable to themselves and to others. Self-confidence is not "taught" in isolated, artificial "self-esteem" exercises, but developed in the context of real uses of meaningful written and spoken language in familiar social and working contexts (Business Council for Effective Literacy, July 1988, p. 10).

Enabling workers to perform worker-defined tasks

Some stakeholders agree that workplace programs <u>should</u> help participants deal with practical uses of literacy but not necessarily uses which come from workers' immediate jobs. Rather, the choice of deciding what functional uses to focus on is primarily in the hands of the learner, and the contexts might be the workplace or other situations where the learner uses communications skills. In many cases, the context chosen is the participant's family, where the participant hopes to be able to understand messages sent home by the child's school, talk with teachers, and be on a par with -- and/or maintain a position of authority vis-a-vis -- her/his child or spouse. In some cases, participants want to improve their chances for a better job-- either in their current workplace or elsewhere.

Those saying that learners should be the ones who define the practical uses of literacy to focus on make the following arguments:

- Most workers already know their jobs fairly well. They are also tired of dealing with job-related matters every day. In some cases they don't really need to do much reading or writing in their current jobs, and there is little or no likelihood that they could ever move into a job -- at least within their current workplace -- where more reading and writing would be needed. They are for these reasons not likely to be motivated by a curriculum which focuses only on their current jobs (Business Council for Effective Literacy, July 1989; Gowen, 1992; Young, 1993).
- To capture learners' motivation, they must see the program as serving their actual interests. These <u>might</u> be job-related, but they might also be other concerns not directly related to their jobs, including family matters, using the local

transportation and health care systems, hobbies, and preparation for better jobs perhaps outside the company (Turk and Unda, 1991).

- If a program can respond to learner interests and help them see education as a meaningful tool for serving their own needs, learners are more likely to be interested in pursuing further education. Instilling in employees such an interest in learning is vital for any company interested in becoming a "learning" organization.

Contrary to the assumption that all employers think workplace education programs should focus only on job-related uses of literacy, employers frequently state that they would like their employees to be able to use literacy in any way they need it, whether job-related or not. Employers frequently say they hope participants will be able to help their children with schoolwork. If participants also are able to use their new literacy skills on the job, so much the better. In such cases, literacy education is seen more as a personal benefit to workers, with secondary objectives of enhancing worker morale and job performance (Jurmo, November 20,1993; Jurmo, November 23,1993).

Contributing to the development of the workplace education field

Funders -- including public funders at the federal and state levels as well as a few private sources like trade associations which have sponsored development of resources for particular industries -- tend to see their funding as an investment in the longer-term development of workplace education resources (Kutner et al, 1991; U.S. Department of Education, May 1992).

Some individuals involved -- particularly adult educators -- see their work as contributing to their own professional growth and to the development of practice which can also be used by others (Evaluation Research, November1992; Jurmo, November 20,1993; Jurmo, November 23,1993).

Economic and social development of workers and their communities

Supporters of workplace education programs sometimes justify putting public money into private companies by saying that worker education programs can contribute to the economic and social development of workers and their communities. Programs are conceived as a means of giving a "second chance" to people who lacked opportunities for quality education as children. This not only helps individual workers to retain current jobs and qualify for better ones; it also strengthens the economy by shoring up local companies and stabilizing the taxbase and general quality of life in communities (Chisman, January 1989; Commission on the Skills of the American Workforce, 1990).

Some who focus on community development hope that workplace education will enable workers to participate more actively in their families and in other community institutions, thereby stemming the erosion of those institutions (Jurmo, November 23, 1993; Turk and Unda, 1991).

Some concerned with issues of diversity and equity in the workplace and beyond would like workplace education programs to enable workers to respond constructively to increasingly diverse co-workers and clienteles. They hope that, by so doing, workers will also be able to live productively with diverse groups out in the community (Rayman and Sperazi, 1990; Shore, 1993; Sperazi and Astrein, 1988).

What does this mean for those concerned about program evaluation?

The fact that stakeholders have such a range of goals for workplace education programs is significant for those concerned about evaluation of those programs. The following are reasons why we should be concerned:

True "partnerships" must respect all stakeholders' goals.

Funders typically portray workplace education programs as "partnerships" between a number of stakeholder groups. A stakeholder should be seen as someone who is investing something (time, money, facilities, reputation, etc.) in the program and hopes for something in return.

Programs often falter when planners don't listen to what stakeholders want and as a result don't develop programs which respond to stakeholders' interests. "Responding" doesn't necessarily mean trying to fill every need even if the needs can't reasonably be met given existing resources. Rather, "responding" might mean honestly telling a stakeholder "we can't do what you're asking for with the time and resources we have." Such a negotiation process produces trust, an understanding of what the program can achieve, and a sense of ownership among stakeholders. They are thus more likely to support the program.

A clear negotiation of stakeholders' expectations is also important for those responsible for program evaluation, because an agreed-upon set of goals provides criteria to judge the program by. Also, if stakeholders feel the evaluation is focusing on determining whether their expectations are being met, they will be that much more likely to pay attention to -- serve as an audience for -- the evaluation's findings.

Stereotypes can strangle creativity.

There is often a tendency to pigeonhole the above-described perspectives and view options in "either/or" and stereotypical terms. Some assume, for example, that a workplace education program can achieve only one thing, when in fact it might be structured to achieve a number of objectives at once.

Some also assume that everyone in a particular stakeholder group thinks the same way and has the same goals for a worker education program. That is not at all true. "Employers," for example, might include production managers who have a "bottom-line" orientation and want an education program to improve workers' performance of particular job tasks. But "employers" might also include human resource managers who are more concerned about employee morale and see an education program as a way of strengthening worker self-confidence and personal growth.

Programs need to have means for all stakeholders to air their expectations and come to some kind of agreement on a reasonable, achievable set of common goals.

Goal-clarification can help us understand the values and assumptions which stakeholders bring to a program.

When stakeholders state what they expect a workplace education program to achieve, they reveal something about how much experience they've had with the workplace education issue. They also demonstrate how they view workers, how workplaces should operate, and the role of education in that organization's culture (Draper, 1991; Schultz, 1992; Waugh, 1991).

Those of us concerned with designing an appropriate evaluation strategy for a program might, by asking stakeholders to state their expectations, find that a stakeholder doesn't know much about workplace education; is looking for a narrow, quick fix; thinks of employees as having deficits (even if it's not clear what those deficits are); and is operating on assumptions which we are not comfortable with. Or we might find that we are essentially in agreement with the stakeholders and that they are open to -- and have already adopted -- many of the values and assumptions we bring to the program.

Negotiating stakeholders' expectations helps bring those values and assumptions out in the open where they can be discussed before we make a commitment to working with the parties involved. This can help us avoid potential conflict further down the line in our working relationship with the stakeholders. Such negotiation can also help us clarify our own personal vision and the collective vision we will need to work effectively together.

> . . . the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively . . . is an essential cornerstone of the learning organization -- the learning organization's spiritual foundation. An organization's commitment to and capacity for learning can be no greater than that of its members (Senge, 1990, p. 7).

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Chapter 2

WHAT EVALUATION CURRENTLY LOOKS LIKE IN WORKPLACE EDUCATION PROGRAMS

Research and policy papers state that evaluation should be an intrinsic part of all workplace education programs, to provide reliable information to those most concerned about program impact and needed improvements. In reality, however, programs have historically given relatively little attention to evaluation, focusing instead on providing direct services. They squeeze in informal internal monitoring when they can and, if the budget permits, hire an outside evaluator. Most recently, some programs have created internal evaluation teams which take responsibility for collecting, analyzing, and reporting information.

What does "evaluation" refer to?

How is the term "evaluation" used?

In the field of workplace basic skills education, the term "evaluation" means different things to different people. The relatively few texts on the subject (Alamprese, 1993; Astrein, Sperazi, and Steinberg, 1987; Barker, 1991; Evaluation Research, 1992; Jurmo, May 1993; Mikulecky and Lloyd, 1993; Philippi, 1992; Rayman and Sperazi, 1990; Sperazi and Astrein, 1988; Sperazi, Jurmo, and Rosen, 1991; Stein and Sperazi, 1991; Sticht, 1991; U.S. Department of Education, May 1992) state that evaluation should be an intrinsic part of the program planning/development process and provide reliable information both to determine program impact and guide needed improvements. However, the term "evaluation" is more commonly used in more limited ways.

Funding guidelines and others advocating the functional context perspective described in Chapter I of this report often describe "evaluation" as a way of generating quantifiable evidence of program impact on individual workers' job performance (Sarmiento, 1993; Schultz, 1992). Many practitioners respond to those funding guidelines by thinking they must therefore produce production figures, accident rates, or other measures of learner job performance.

Many practitioners also hang on to the measures of learner gain they are familiar with from non-workplace settings: standardized tests. They assume that such tests provide some kind of evidence of program impact.

Our definition

This paper sees evaluation in the following broad terms:

In workplace basic skills education, evaluation should be a process of providing information to stakeholders to enable them to (1) clarify goals, (2) track outcomes, (3) identify factors contributing to or impeding success, (4) decide whether to continue investing resources and, if so, (5) determine what actions are needed to meet stakeholders' goals.

How this chapter is organized

This chapter is intended to map out what evaluation looks like in workplace basic skills programs in North America. We see three scenarios for evaluation at present:

- Informal, internal monitoring: Most programs carry out a good deal of de facto, informal evaluation work on a day-to-day basis. Practitioners, learners, and other stakeholders monitor learner progress and broader program impact through observation of learners inside and outside the classroom, informal discussions among stakeholders, and review of written and oral classwork. In these cases, the responsibility for evaluation is primarily in the hands of the provider, and the monitoring is done to help keep stakeholders invested in the program and to clarify how the program might be adjusted to produce results meaningful to stakeholders.

- More-formalized evaluation by outside evaluators: More-formal evaluation -- with more systematic gathering, analyzing, and reporting of data -- has historically tended to occur only where program funders require it. In those cases, funders also often require that the evaluation be carried out by an outside evaluator who, it is assumed, has the technical know-how and objectivity to determine whether the program is meeting its stated goals (U.S. Department of Education, May 1992).

• More-formalized internal evaluation by stakeholders: This approach to evaluation is a relatively new one. It attempts to combine the best of the above two scenarios by keeping the control for the evaluation process primarily in the hands of stakeholders closest to the program while ensuring technical efficiency and objectivity. This kind of evaluation involves stakeholders in a systematic process of identifying program goals, clarifying what information they want about the program, gathering and analyzing that information, and then making decisions with it. This approach aims at providing useful information while building stakeholder ownership and support for the program.

To further clarify what evaluation currently looks like in workplace education programs, below we describe how the various components of evaluation process look within these three scenarios. The components described are:

- Institutional framework
- Stakeholders responsible for evaluation
- Audiences and purposes
- The information gathered
- Resources allocated
- How information is gathered
- How information is organized and analyzed
- How findings are reported
- How reports are used

This overview draws on a number of sources, including interviews and focus groups with workplace educators, review of evaluation reports, and review of recent articles on workplace literacy evaluation.

Evaluation, component by component

Institutional framework

While the best-known workplace basic skills programs in the United States are those funded by the U.S. Department of Education through its National Workplace Literacy Program, numerous other programs are carried out independent of that funding source. These include efforts funded by state workplace education initiatives (e.g., in Massachusetts and New York), labor unions, and by employers themselves. The U.S. Department of Labor has also funded pilot programs, and a number of federal agencies (including the U.S. military) have funded programs for their own employees.

Within these institutional frameworks are a range of stakeholders -- people who have invested time, money, or other resources in the workplace education program and who expect something in return. Primary stakeholder groups include learners, employers (both higher-level and supervisory-level managers), union representatives, education providers, and funders.

Stakeholders responsible for evaluation

Informal, internal monitoring of programs is done by the educators, learners, and other stakeholders most involved in the program on a day-to-day basis. Most of the responsibility for evaluation is in the hands of the education provider, who is seen as having the most expertise and time to give to the program. The resulting monitoring is done to help keep stakeholders invested in the program and to clarify how the program might be adjusted to produce results meaningful to stakeholders.

More-formal evaluation done by outside evaluators is often carried out at the request of outside funders and gives responsibility to an outside evaluation specialist. It is assumed that this outside evaluator has the technical know-how and objectivity to determine whether the program is meeting its stated goals.

"Team" evaluation places responsibility for the evaluation process in the hands of a representative cross-section of program stakeholders: higher- and supervisory-level managers, union representatives, participating workers, and education staff. The team shares responsibility for the evaluation process with a facilitator, who may be a team member or from an outside institution.

Audiences and purposes for evaluation

Ideally, an evaluation should provide various audiences who have an interest in the workplace education program with information they can use to make some sort of decision. Typically, stakeholders want to be able to make an informed decision about (1) whether to continue investing in the program and, if so, (2) what actions to take to see that goals are met (Barker, 1991; Jurmo, May1993).

In reality, those involved in evaluations are not always sure how the information they collect will actually be used. Sometimes data are collected primarily to fulfill funders' reporting requirements and, once reports are submitted, it is not clear what is done with the information (Jurmo, November 23, 1993). Some might fear that evaluations are merely a smokescreen, a ritual which someone is putting the program through as a way of forcing changes on the program (Jurmo, November 20, 1993).

Outlined below are potential audiences for a workplace education evaluation, along with purposes which such evaluations might serve.

Less formal, day-to-day internal monitoring of program progress and needed improvements is done primarily for instructors and learners. The resulting information showing positive impact maintains learner and teacher motivation and demonstrates to instructors what activities produce the best results. Conversely, information which indicates lack of positive impact and problems in the program shows instructors and learners areas which need improvement. Such internal monitoring, then, serves three inter-related purposes: to maintain stakeholder interest and enthusiasm, further clarify goals, and identify steps which instructors, learners, and others might take to achieve desired objectives.

More-formal evaluations done by insiders or outside evaluators are typically aimed at audiences external to the instructors and learners normally seen as the "core" of the program. The external audiences are higher-level and supervisory-level managers, union officials, outside funders, the administration of the education providing institution, or others who have invested financial resources in the program and who presumably expect the program to achieve its stated goals. Evaluations in such cases gather information to clarify what stakeholders hope the program will achieve and then demonstrate what the program has in fact accomplished -- in terms of anticipated (and possibly unanticipated) outcomes. In turn, it is typically hoped that those who control important resources will support the program further (Philippi, 1992).

Team evaluations attempt to not only produce information which stakeholders can make decisions with, but -- by involving stakeholders in the process -- generate understanding of and support for the program among those stakeholders, as well. Team evaluation is also seen as a way of helping stakeholders to develop the team decision-making skills they need to deal with other issues they face inside the workplace (Sperazi and Jurmo, 1994).

More-systematic evaluations also are sometimes aimed at others in the larger workplace education field for the purpose of demonstrating positive (and sometimes not-so-positive) lessons learned in the program. It is hoped that the field will thereby learn from the program's experience and improve practice accordingly (Kutner, Sherman, Webb, & Fisher, 1991; U.S. Department of Education, May 1992).

More-formal evaluations can also serve instructors and learners by clarifying more precisely what in other stakeholders' view is being accomplished and what needs to be done to improve the program.

Other potential audiences for evaluations include (Jurmo, May 1993):

- Potential participants in the program: They might like to know whether they, too, might benefit from participating. These might include employees who had signed up previously but left without completing the program.
- Participants' families and communities: They have something to gain from programs which increase the knowledge, self-esteem, and skills of their members. For example, better-educated workers can help their children succeed in school and can inform themselves about local issues and get involved in community activities.
- The company's clientele: Customers expect high-quality service and might want to see evidence of the company's investment in worker training.
- Regulatory and certifying agencies: Government (e.g., Occupational Safety and Health Administration) and industry (e.g., ISO 9000) agencies which certify the quality or safety of a company's operations might want to see evidence that the company is training workers to handle new demands.

• Other companies in the area or in the same industry: Other companies wondering what to do vis-a-vis worker basic skills might like to know what an investment in worker education might produce.
• The company's insurers: Insurers might like to know what the company is doing to ensure the safety of its workforce, customers, and products.
• Taxpayers: Taxpayers might want to know how public funds are being used in worker education programs.
• Economic development policy makers: Policy makers in the public sector (e.g., government workforce development agencies) or private sector (e.g., policy think tanks) might want to know where best to invest training funds.
• News media: News media responsible for covering workforce and education issues should welcome information about promising developments and emerging issues in workplace education.
• Vendors: Vendors of workplace education services and products should, ideally, develop products based on an understanding of what is actually useful in workplace settings.

The information gathered

In informal internal monitoring, information is gathered on such questions as "how are learners doing?" "what are they learning?" "what are they most interested in?" "how are they using what they're learning outside the classroom?" Feedback is also solicited on how various program components (e.g., curriculum content, scheduling, facilities) might be improved.

More-formal evaluations -- both "external" and "internal" ones -- look at essentially the same questions. They, however, attempt to collect the information from a broader range of sources; they sort and summarize it in a more systematic way; they present the information to stakeholders who aren't normally so directly involved in the program; and they follow up with those audiences to clarify any questions they might have and negotiate possible additional support from them.

Several researchers (Barker, 1991; Mikulecky and Lloyd, 1993; Philippi, 1992) suggest that evaluations organize information around the following questions based on the work which Stufflebeam did in non-workplace literacy settings:

• Do stakeholders understand and share goals?
• Are resources sufficient to achieve those goals?
• Are learning processes and materials sufficient?
• Have goals actually been accomplished?

Our own experience with workplace education evaluations indicates that evaluations might organize collected information around the following categories of questions (Jurmo, May 1993):

1. Goal clarification: What do stakeholders hope the program will achieve -- not only at the beginning but throughout the life of the program?
2. Assessment of impact: What in fact is the program achieving -- both in terms of anticipated outcomes and unanticipated ones?
3. Strengths and limitations: What factors are helping or hindering progress toward program goals?
4. Continuation: Should stakeholders continue to invest in the program?
5. Actions needed: If the program is to continue, what actions are needed to strengthen it? Apart from the education program, should other actions be taken to meet stakeholders' goals?

The kinds of information sought in an evaluation depend very much on the goals which stakeholders have set for the program (Taylor, 1991). In other words, you can't determine whether a program has met its goals if you aren't clear about what those goals are in the first place.

As is stated in the first chapter of this report, stakeholders have a wide range of expectations for workplace education programs, although many in the U.S. have adopted the perspective that workplace literacy programs by definition should focus on specific job-related reading tasks.

Sticht (1991), for example, argues that because U.S. Department of Education programs by definition are to focus on improving learner job performance, then evaluations should attempt to gather empirical evidence of changes in job-related behavior in which literacy plays a role and which the program focuses on. He suggests that evaluations of NWLP programs use the categories of program components outlined in the Department's Invitation for Proposal as the categories of information to focus on.

Recent evaluation work, however, has broadened the scope of information a workplace education evaluation might collect. Mikulecky and Lloyd (1993) have looked at not only participants' abilities to perform particular job-related tasks but at their family-related literacy behaviors and at such variables as learners' belief about themselves as literate, literacy practices (on and of the job), the processes the learners use to deal with literacy tasks, and what plans the learners have developed vis-a-vis using their literacy abilities.

Alamprese (1993) suggests that evaluations break outcomes down into "participant outcomes" (i.e., impact on individuals' literacy skills, job performance, motivation/self-esteem, further education, job promotion, and functioning in family and community), "workplace outcomes" (i.e., productivity, absenteeism, safety turnover, grievances, job restructuring, employee participation), and "partnership outcomes" (i.e., expansion of partners, changes in partners' commitments and relationships, changes in educational programs and support services, and institutionalization of workplace literacy services).

Sarmiento (1991 and 1993) recommends that evaluations examine not only changes in individual participants but in the behavior of the larger organization. For example, as a result of the education program, has the company incorporated ongoing basic skills education into the company training and development strategy?

In recent evaluations of programs in the U.S. and Canada, Sperazi, Jurmo, and Folinsbee have found that stakeholders have a wide range of expectations for programs and that, to provide information of program impact which is relevant to those stakeholders, the evaluation process should acknowledge and try to respond to each of those expectations (Garlick-Griffin, 1993; Jurmo, November 20, 1993; Jurmo, November 23, 1993; Jurmo and Folinsbee, 1994; Program Planning Consultant Group, 1992; Sperazi and Jurmo, 1994).

Resources allocated

Informal, internal evaluation is typically a shoe-string activity, consisting of hallway conversations and occasional committee meetings. In some cases, instructors devote additional time to keeping track of learner progress and discussing progress, problems, and next steps with learners. This is sometimes covered in budgets under "instructor planning time."

More-formal evaluations can be fairly costly, especially if outside evaluators are brought in. These evaluators might spend some time with the program, interview various informants and read project documents, develop customized assessment instruments, analyze resulting data, and prepare and present reports to various audiences. Historically, few resources have been given to evaluating programs on the belief that resources should go primarily to working with learners. This appears to be shifting in recent years within the NWLP, as the latest Invitation for Proposal states that programs should pay special attention to developing customized evaluation procedures. New legislation also has created new National Workforce Literacy Strategies grants which would, among other things, test new evaluation approaches (U.S. Department of Education, May 1992).

How and where information is gathered

In informal, internal evaluation, information on program impact and needed improvements is gathered through the following activities:

- Informal and more-formal tests (including standardized tests, customized tests focusing on uses of literacy of particular concern in the program, cloze tests, etc.);
- Simulations (problem-solving scenarios in which learners are to demonstrate their ability to deal with a particular communication task);
- Observation of learners at work and in the classroom;
- Interviews, focus groups, questionnaires, and check-lists for learners, supervisors, union representatives, co-workers, instructors, and other stakeholders;
- Document review of learner written work and job-related records (e.g., production figures).

More-systematic evaluations use essentially the same procedures but might focus on the analysis and reporting of statistical data. Although alternative, "qualitative" assessment is gaining more recognition among literacy educators, it is still often more difficult to report and less valued, especially by others from outside the literacy field.

In these data-gathering activities, the sources of information include both "human" sources like learners, instructors, supervisors, union representatives, and other co-workers, and "material" sources like classroom and workplace documents which demonstrate workers' literacy and/or job performance.

How information is organized and analyzed

In many programs, funders and others require instructors and administrators to compile basic information on atte: ‿ance and learner progress in some kind of periodic reports. In some cases, funders have established guidelines for how that information should be organized. In others, it is left up to the education staff to summarize basic information in whatever formats seem sensible.

Some practitioners have developed their own methods for compiling useful information for learners. An increasingly-popular concept is that of portfolios, or folders, in which the learner and the instructor compile various kinds of evidence of learner progress. For example, a portfolio might include an attendance sheet completed by the learner, a list of goals developed by the learner with the instructor, a checklist showing what objectives have been met and which need more work, and sample written work and tests completed by the learner.

In programs where standardized tests and workbook exercises are used, the instructor can simply compile the test scores into an aggregate summary of scores and use them for pre- and post-comparisons.

The responsibility for compiling the information gathered in these and other data-gathering activities varies, depending on the type of evaluation being done, the resources available, and -- in particular -- the program's approach to evaluation and planning. In informal, internal monitoring of the program, this responsibility can be primarily in the hands of the instructor or administrator, or it might be shared with learners and other stakeholders. In evaluations carried out by an outside evaluator, responsibility for data-gathering and -analysis is typically more in the hands of the outsider.

How the data are organized and analyzed depends largely on the type of data gathered and the expertise and orientation of those doing the analysis. The result can be information packaged in quantified format or summaries of less-easily-quantifiable feedback from various information sources.

In team evaluations, a representative group of learners, managers, supervisors, union officials, and education staff analyze the data which they or some individuals on the team gather.

How findings are reported

Findings from the relatively informal, internal form of evaluation can be reported in informal ways, in written reports or presentations to various stakeholders in the worksite. More-formalized evaluation reports are typically presented in detailed written format, with an executive summary, a description of the evaluation methodology used, and various appendices summarizing data, data sources, and data-gathering instruments.

These more-formal reports might be presented to intended audiences and then discussed in a follow-up meeting or simply mailed to funders and other more-distant audiences, without necessarily discussing them further.

In reports intended to inform others in the workplace education field about the program, these reports are disseminated through clearinghouses (e.g., the ERIC Clearinghouse on Adult, Career, and Vocational Education at Ohio State University); in presentations at local, state, and national conferences; through mailings to interested parties; and through informal in-person and long-distance technical assistance.

How reports are used

Internal, informal reports appear to have the most chance of being used, as they are tailored to present information known to be of interest to audiences close by. It appears that many more-formal reports are not used as their authors hope. Practitioners complain of sending carefully-prepared reports to more-distant audiences (i.e., parties not normally directly involved in program activities who nonetheless are actual or potential supporters of the program) and never getting any response from those audiences (Evaluation Research, 1992; Sperazi and Jurmo, 1994).

Sources involved in the National Workplace Literacy Program sometimes complain that there are inadequate mechanisms for ensuring that others in the field can get access to and build on the findings contained in the end-of-project reports which all NWLP programs must submit.

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<u>*Chapter #3*</u>

STRENGTHS AND NEEDED IMPROVEMENTS OF CURRENT EVALUATION PRACTICE

A solid evaluation should respect stakeholder confidentiality; be seen as a positive, useful tool for making constructive decisions throughout the life of the program; and produce clear, reliable information about program impact and needed improvements. Evaluation should be guided by a spirit of inquiry, lifelong learning, and continuous improvement. Those involved need to understand not only evaluation itself but the special nature of workplace education. Audiences should use evaluation reports to refine funding guidelines, professional practice, and program goals.

Evaluators need, conversely, to avoid overlooking the information which stakeholders really want. Evaluations should not be an afterthought or seen as "for someone else." Evaluation should not be limited to "a test." Information should not be of dubious credibility, unclear, neglected, or unnecessarily negative in tone. Valuable findings should be disseminated widely to those who can learn from them. Workplace evaluations shouldn't oversimplify the relationship between literacy and productivity. Nor should they ignore the insights of practitioners, learners, supervisors, and others with valuable knowledge. And evaluations should not be given low priority and low funding.

What a good evaluation should look like

Our own experience and feedback from others in the field tell us that an evaluation of a workplace education program should:

- Respect the confidentiality of all stakeholders.

- Be viewed as a positive, useful tool to enable stakeholders to make decisions and take constructive actions related to the goals they've set for the program. The evaluation process is based on "values . . . from the workplace community" itself (Philippi, 1992, p. 9).

• Produce information about program impact and needed improvements which is reliable, clear, and relevant to stakeholders. Clear, relevant evidence of positive impact enables stakeholders to see the value of the program and continue investing in it (Philippi, 1992, p. 13).

• Produce reports which stakeholders actually use (Kinsey, 1978).

• Encourage all involved to be frank and open in their analysis of the program, in the "spirit of inquiry" and "lifelong learning" (Sticht, 1991, p. 10), constructive criticism, and continuous improvement. Such "responsive" evaluation responds to stakeholders' interests, not externally imposed ones (Philippi, 1992, pp. 8-9).

• Be carried out by people who understand not only evaluation procedures but the workplace education field, as well (S. Imel, personal communication, February 18, 1994).

• Be based on an understanding of good practice in workplace contexts, rather than follow assumptions left over from other contexts (S. Imel, personal communication, February 18, 1994).

• Use procedures which are "user-friendly" and not unnecessarily obtuse and complicated, to enable a wider range of stakeholders to understand and participate as active players in the evaluation process (Kinsey,1978).

• Be integrated into the program planning process from beginning to end (Evaluation Research, 1992; Sticht, 1991), rather than be seen as something to be "tacked on" at the end to please a funder.

• Use criteria relevant to the goals stakeholders set for the program (Evaluation Research, 1992).

• Have enough material and human resources to produce useful, high quality results (Evaluation Research, 1992).

• Uses several data-gathering activities and several information sources, to provide information which is useful to all stakeholders, to enable them to better understand and support the program.

• Be used to shape funding guidelines and practice in relevant, useful ways.

• Clarify what programs should be aiming at and show them how to get there, rather than reinforcing inappropriate goals and practice.

What we need to avoid

We have in many cases learned the above lessons the hard way, by being the implementers -- or victims -- of evaluations in which:

• Confidentiality is not respected. In some cases, data are gathered or reported in ways which embarrass informants and/or those being evaluated. This revelation of information can also jeopardize their status in some way.

• Evaluation is seen as a threat. Those operating a program might resist participating in an evaluation because they fear that they will be evaluated harshly and their professional and financial status jeopardized as a result (Evaluation Research, 1992).

• Evaluation is seen as a burden. Some might recognize the potential benefits of a good evaluation, but feel that the costs of staff time, consultant fees, and so forth outweigh the benefits. They resist getting involved in evaluation as a result (Evaluation Research, 1992).

• Evaluation is seen as too complicated. Some stakeholders might recognize the benefit of a good evaluation, but see evaluation as something complicated, requiring special expertise that only outside experts possess (Mikulecky and Lloyd, 1993). These stakeholders feel that they don't have the time, self-confidence, and/or interest to develop this expertise and don't want to take the time to locate and work with someone who does.

• Evaluation is seen as irrelevant. Some stakeholders feel that they already have a good sense of what is being achieved and what needs to be done to strengthen the program. They know this from direct experience interacting with and observing staff and learners. They feel that it's therefore not worth the extra effort required to set up a formal evaluation which wouldn't likely tell them anything they don't already know and which might instead produce a distorted, overly-narrow, or irrelevant picture of the program.

• The evaluation misses information important to stakeholders. Some evaluations might do a good job of gathering particular types of information while missing out entirely on other information which some stakeholders could benefit from. A workplace education evaluation might, for example, do a good job of reporting test scores, documenting attendance and the number of modules taught, but fail to capture what impact all of this activity had on the learners' day-to-day life on or off the job. Another example: A learner might want to know -- in simple terms -- "how am I doing?" and "where should I go from here?" She might not be interested in an evaluation which produces figures on attendance, costs-per-student, and reduced scrap rates.

• Evaluation is an afterthought. Evaluations too often are begun at or near the end of the program, rather than integrated into the planning process from the start. In such a case, there is unlikely to be any baseline data against which learner outcomes can be compared (Sticht, 1991).

• Evaluation is seen as "for someone else." Some think "reports to funders" when they hear the word "evaluation." Rather than see evaluation as a useful tool for decision-making, they see it as a cumbersome ritual to produce information for someone else who probably doesn't pay much attention to it anyway.

• Evaluation is equated with "a test." Rather than seeing evaluation as process of gathering information and making decisions related to program impact and needs, many equate evaluation with some kind of "test." It is assumed that this test will measure participants' skills and produce a set of numerical scores as evidence of what is happening in the program (Evaluation Research, 1992).

• The information generated is of dubious credibility. In some cases, evaluations produce information which is "of a suspicious nature." Those gathering the information might have unknowingly or knowingly asked the wrong questions or asked them in a way which failed to elicit honest, accurate information. Or perhaps those who analyzed the information mistakenly or purposely distorted the information to produce conclusions not based on the evidence gathered. What is lacking is "empirical, confirming evidence"; instead there is "too much subjective self-reporting" with "a danger of self-deception and therefore bias" (Sticht, 1991, p. 10).

• The information generated is not clear. Sometimes those gathering information record too much detail, record it in a jumbled or confused way, or otherwise produce information which is difficult if not impossible for others to understand.

• Reports are produced but not used. Programs in some cases go to the trouble and expense of producing an evaluation report which accurately reflects program impact and needs, but they then find that the audiences to whom they submit the report don't use it appropriately. Audiences might be too busy or not understand the field enough to see the value in the information represented in the report. For example, an employer might let a report sit on her desk because she is too busy with other business. A public funder might be simply overwhelmed with too many such reports, let them pile up, and never assign anyone to study them and use them to refine funding guidelines. Whatever the reason, those getting such a response to a good quality evaluation effort are less likely to invest their resources in producing a solid one the next time around (Evaluation Research, 1992).

• Valuable evaluation findings aren't shared with audiences which might be interested in them. Sometimes evaluations produce information which would be valuable to particular audiences but the findings are never shared with those audiences. For example, potential program participants might like to hear how the program has helped their co-workers, but no one takes the time to present that information to them in a clear way. Similarly, other businesses or unions in the community might like to hear how a successful workplace education program operates, but no one thinks about providing such information in such forums as a Chamber of Commerce luncheon or coverage in the local newspaper. Perhaps most troubling is the fact that there are few professional development opportunities for practitioners in which they could get access to and learn from those evaluation reports which have been done.

• Discussions of problems have a "negative" tone. Some programs operate in a context where there is a history of poor relations among some stakeholders. In such a context, it is difficult to present evaluation as a way of identifying both positive achievements and problems to be constructively dealt with. Focus groups can degenerate into "gripe" sessions rather than an opportunity to continuously improve the education program.

• Evaluations are carried out by people who don't adequately understand the field. The workplace literacy field is relatively new, and few have had experience doing evaluations in this unique and evolving context. Evaluations might thus be put in the hands of people either with little or no prior evaluation experience or who have done evaluations in contexts much different from the program to be studied. This increases the likelihood that the evaluation will focus on the wrong kinds of questions or be guided by assumptions and standards not appropriate to adult workers in today's changing workplaces (Evaluation Research, 1992; S. Imel, personal communication, February 18, 1994).

• Evaluations over-simplify the relationship between literacy and productivity. The relationship between a worker's basic skills and his or her job performance is not straightforward. Many other factors can impact on the worker's job performance, so an evaluation which assumes that an improvement of a participant's job performance can be attributed to participation in the basic skills program might be misleading (Evaluation Research, 1992; Sticht, 1991).

• Evaluations define focal points narrowly, when broader and more complex information needs to be examined. This has the effect of reinforcing inappropriate assumptions about workplace education. Some of these arguments for new ways of looking at programs are outlined below:

Schultz (1992) says that rather than defining literacy education as "reading and writing, and possibly listening and speaking skills handed to them by their instructors," programs should view "literacy and learning as active, constructive processes which build on the knowledge teachers and learners bring with them" (p.14), a perspective "more appropriate to the new workplace" (p. iv). (She acknowledges, however, that the demands which workers will have to contend with in the new workplace have not yet been adequately identified.)

Gowen (1990) argues that evaluations which focus quantitatively on increased productivity, improved attendance, and increased discrete basic skills fail to provide information about three important areas: "the literacy beliefs that inform the actions of adults perceived as in need of enhanced literacy skills; the literacy beliefs of the providers who fund and develop curriculum and pedagogy; and the social and historical contexts and institutional structures that foreground and help shape these belief systems" (p.3).

Stein (May 1993) cites researcher Sylvia Scribner's view that workplace literacy research needs to re-think how learning is viewed in a workplace context: "School-based research has fostered a conception of learning as an activity separate from other life activities. But as soon as we enter the workplace, we find that this conception does not hold: the defining feature of on-the-job training is that teaching and learning are occurring simultaneously with getting-the-job-done, with working. Training occurs in the course of working . . . It is embedded in on-going work activities" (pp. 5-6).

Mikulecky and Lloyd (1993) cite Lytle's suggestion that "performance measures (tests and exercises) miss a good deal of important information about adult literacy learning" (p. 30). They have broadened the scope of their evaluation work beyond just looking at productivity-related measures to look at learners' beliefs about literacy and themselves, learner literacy practices, the literacy processes employed by a learner while reading, and the plans a learner has which may involve literacy use.

Mikulecky and Lloyd also acknowledge that workplace education programs might encompass a number of goals beyond enhancing individual workers' ability to read job-related materials. A "multi-strand" program might also include GED classes, an ESL course, home study or self-paced computer work on materials not necessarily job-related, and technical training (pp. 3-4). Rather than being seen as distractions from job-related goals, these services can reinforce each other by providing multiple opportunities and incentives for learning (p.11). They also might be incorporated into an evaluation of the overall program.

Schultz (1992) and Rosen (Sperazi, Jurmo, and Rosen,1991) argue that evaluations should define curriculum as a process rather than as a product. Those that focus on numbers of modules and contact hours miss what the curriculum really consists of.

Sarmiento (1991) suggests that evaluations look at not just impact on individual workers' behavior but at changes in the host organization, as well. That is, if employers don't provide incentives and opportunities for workers to use what they are learning in the classroom, an education program will have limited lasting impact.

Hull (1991) argues that

> . . . we have not paid enough attention, as we measure reading rates, design curricula, and construct lists of essential skills, to how people experience instructional programs and to how they accomplish work . . . Nor is it common, in studies of work or reading and writing at work, to acknowledge the perspectives of workers -- to discover the incentives and disincentives they perceive and experience for acquiring and exercising literate skills. Alternate points of view and critical reassessments are essential if we are ever to create frameworks for understanding literacy in relation to work; if we are ever to design literacy programs that have a prayer of speaking to the needs and aspirations of workers as well as employers; and most importantly, if we are ever to create structures for participation in education and work that are equitable and democratic . . . we have got to let some different voices be heard (p. 2).

<u>Those with significant knowledge of the program are not given opportunities to document and reflect on what they have learned.</u> Schultz (1992) calls for teacher-research, to enable "teachers to explore their own guiding philosophies and varied ways of interacting with learners." Such descriptions "could provide valuable information to program planners and policymakers." She suggests that learners also be invited "to participate in research about themselves and their own learning" (p. 50) to clarify the

knowledge and practices they bring with them, how they go about learning on and off the job, and other important questions not normally considered.

Pritz and Imel (1993) similarly call for analysis by practitioners "in the trenches" about the "innovative practices that arise spontaneously as part of an activity, as well as the tacit knowledge practitioners possess about their work." The field can merge this "craft knowledge" -- "insights and valuable ideas" -- with other "scientific knowledge generated by researchers and evaluators" (p. 119).

• Evaluation is given low priority and low funding: Money-starved workplace educators have understandably channelled limited available resources into instruction rather than evaluation, which is seen as almost a luxury or as an academic exercise. For this and many of the other reasons cited above, evaluation is given low priority and, therefore, few resources. Even evaluators who recognize the above evaluation-related needs and want to develop more appropriate forms of evaluation have to try to do so with small budgets. This discourages experimentation and reinforces the status quo of both evaluation and workplace education.

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Chapter 4

PROMISING DEVELOPMENTS

Innovators in the workplace education field are developing new ways of evaluating workplace education programs and, with them, new forms of workplace education itself. Many of these innovations emphasize collaborative decision-making by stakeholders. Education programs are thereby more directly tied in with new ways of organizing work which emphasize teamwork and continuous improvement.

Within the workplace education field, some funders are now encouraging programs to follow collaborative decision-making principles. Practitioners are coordinating all program components in an integrated cycle characterized by continuous, collaborative decision-making. Stakeholders are being encouraged to first analyze the organization's overall human resource needs and policies before deciding whether to embark on an employee education initiative. Practitioners are creating new forms of individual assessment, curriculum development, and evaluation which put greater responsibility into the hands of program participants and other stakeholders. Practitioners are applying collaborative learning principles to their own professional development, by establishing peer-support systems.

In the related fields of adult literacy education, social sciences, and training and organizational development, innovators have developed assessment, evaluation, and program models which mirror many of the innovations being developed by workplace literacy educators.

Each of these disciplines might benefit from greater cross-fertilization with the others.

In the previous chapter, the reader is presented with a lengthy "to do" list. It describes actions which should be taken to create meaningful evaluations.

In fact, many practitioners, researchers, employers, unions, and funders are trying to develop new ways of thinking about -- and planning and implementing -- evaluations of workplace education programs. Many of these innovators see evaluation as a tool for creating the kinds of collaborative workplace education programs -- and collaborative, learning-oriented workplaces -- described in Chapter I. This vision is important, as it provides motivation for work which is often unrecognized and minimally funded.

Listed below is a sampling of such efforts in the workplace education field, along with evaluation and education practices being developed in such related disciplines as adult literacy education, evaluation, organizational development, and training. These examples are presented for those looking for ideas and inspiration to use in their own efforts to improve evaluation practice and policy.

Within the workplace education field

Changing funding guidelines

The Massachusetts Workplace Education Initiative: In 1991, the Massachusetts Workplace Education Initiative (MWEI) changed the way it approached evaluation of the workplace programs it funded. For three years, the Initiative had relied on an outside evaluator and occasional updates from program directors about attendance, test scores, and so forth. Based on recommendations from its evaluation consultant, Evaluation Research, MWEI agree to explore new ways of more actively involving management, union representatives, and learners in goal-setting and monitoring of their programs. The Initiative also wanted programs to produce clearer evidence of program progress toward stakeholder goals.

MWEI asked its outside evaluator, Evaluation Research, to develop a new approach to evaluation which would respond to those guidelines. The result was a pilot project in which six workplaces created evaluation teams whose members (1) clarified and prioritized goals, (2) identified what information they wanted from an evaluation and how they would use it, (3) designed and then used data-gathering activities to collect the desired information, (4) analyzed the resulting information, (5) reported their findings to appropriate audiences, and (6) took follow-up action in response to the report itself and feedback from their audiences (Sperazi, Jurmo, and Rosen, 1991).

MWEI felt that this pilot project demonstrated the value of a systematic, "team" approach to program planning and evaluation. During the next few years, guidelines were revised to require all funded programs to be managed by teams composed of representative stakeholders. The Initiative provided training and technical assistance to those teams, to help them perform the new roles required (Curry, 1993; Sperazi, 1991).

The U.S. Department of Education: The U.S. Department of Education has generally strictly adhered to the "functional context" perspective described in Chapter I. In recent years, however, practitioners and researchers have questioned the Department's particular interpretation of the concept of contextualization and the legislation which supports the National Workplace Literacy Program.

For example, in September 1991 the Department called together representatives of 39 NWLP projects and asked them for feedback on six issues: establishing and maintaining partnerships, curriculum, recruitment, assessment and evaluation, worker involvement, and future policy directions. In a constructive, positive, two-day meeting, participants suggested many ways of strengthening all of these program components. Many participants asked that NWLP not require programs to focus on narrow job skills which research and experience were showing don't reflect what workers and companies actually need and are interested in. Many also asked for new ways of involving all stakeholders in program planning, implementation, and evaluation. Some participants also suggested that NWLP fund only programs clearly linked to a high-performance model of organizing work. These requests demonstrated that the NWLP was fulfilling its mission of allowing practitioners to identify what was needed to provide effective workplace educaiton services. In this case, practitioners were asking that the NWLP continue to encourage creative innovations in response to emerging workplace needs rather than require programs to go down a single path predetermined several years earlier (Evaluation Research, 1992).

Subsequently, the Department's particular way of interpreting "contextualization" was more pointedly questioned in several widely-circulated papers. Schultz (1992) argued that NWLP had latched onto a "new orthodoxy" which defined functional literacy in a way which doesn't reflect good literacy practice or what the new workplace actually requires of workers. Sarmiento (1993) claimed that NWLP was pushing programs to reinforce outmoded, Tayloristic roles for workers rather than dynamic, active, thinking ones. He said that NWLP was interpreting legislative guidelines too narrowly. Gowen (1992) said that the NWLP project she worked in was essentially irrelevant, in that workers were given little say in what they were to learn and the curriculum focused on topics of little interest or use to them. Hull (1991) claimed that the functional context model tended to isolate workers' basic skills from other factors affecting their productivity and isolate workers' themselves from the process of setting workplace education goals. The result is programs which miss the mark in terms of helping workers and their organizations make relevant improvements.

Perhaps partially in response to the above arguments, the Department has adopted some of the thinking which is basic to the collaborative approach. For example, it has now acknowledged the need to more actively involve all stakeholders (including learners) in program planning and governance, and to invest more in ongoing evaluation (U.S. Department of Education, May 1992). It has also stated that:

> . . . the future of workplace literacy (is linked) to the American economy's shift from traditional production organizations to high performance organizations. In traditional organizations -- and in traditional workplace literacy programs -- workforce learning is not viewed as a meaningful activity in relation to the production process. Traditional workplace programs are short-term and problem-centered. High-performance organizations view workplace education as an integral aspect of the production process. As the American economy transitions to the twenty-first century, workplace education must respond to the education needs of high performance organizations (p. 11).

This statement borrows the language of advocates calling for more-collaborative, team-based approach. It can be contrasted with other statements made by the Department during the same period, which claimed that the Department's adherence to a stricter functional context approach was required by Congressional statute (Evaluation Research, 1992, p. 47 and Appendix). The fact that the Department was using the language of "high-performance" advocates was taken by some as a sign that the Department was willing to consider new ways of defining and responding to workplace education needs.

Creating new program models

Largely in response to their own experience and to the arguments by proponents of a collaborative approach, practitioners are developing new collaborative models and practices. Some examples are outlined below:

Integrating program components into a collaborative planning cycle: ABC CANADA (based in Toronto), with Literacy Partnerships (based in New Jersey), has mapped out a collaborative model for planning workplace initiatives which integrates various program components into a cyclical (rather than linear) arrangement. From its earliest stages, the process relies heavily on collaborative decision-making by a team of stakeholders. The team first carries out a broader analysis of the organization's needs before focusing on employee basic skills per se. An evaluation plan is designed prior to implementation of program activities, and results are continually fed back to the team for continuous improvement. This model resembles and is designed to support other team-based continuous improvement activities being used in the organization (Folinsbee and Jurmo, 1994a; Jurmo, April 1994; Waugh Folinsbee, 1992; Waugh Folinsbee, 1991).

Analyzing organizational needs: ABC CANADA has pioneered a method of analyzing employee basic skills needs as one of many needs a company should consider. Called a "workplace needs assessment" (or "organizational needs assessment"), this process is carried out by a site planning team like those developed in the Massachusetts Workplace Education Initiative, above. This analysis is the first activity undertaken by a team. Members examine the key factors which impact an employees' job performance and quality of work life, one of which might be basic skills. The analysis identifies which of those factors impede workers and what steps the organization can take to remove those impediments. This collaborative process demonstrates that an employee education program will not, by itself, help an organization transform itself to a more productive and just workplace. Rather, both the organization and individuals must take steps to continually improve themselves.

This process is broader in scope than the literacy task analysis process commonly used in functional context programs. It does not automatically assume that employee basic skills is the primary problem to be dealt with. Rather, the planning team goes in with an open mind, trying to figure out what a company must do to assure that workers can use the skills they already have and might develop in an education program. By starting the planning process with a team, an organizational change initiative builds stakeholder understanding of and buy-in for the program from the start. Once the organizational needs analysis is done, the team continues to oversee other components of the planning cycle (Folinsbee and Jurmo, 1994b; Waugh Folinsbee, 1992; Waugh Folinsbee, 1991).

In the United States, this methodology has been adopted by REACH, an education program for New York State employees. Sponsored jointly by the Governor's Office of Employee Relations and the Civil Service Employees Association, REACH staff have conducted such organizational needs analyses at several sites in the past year. They have thereby not only determined needs at those sites but clarified how such a needs analysis process might be adapted in other sites around the state (Jurmo, April 25,1994; Sperazi and Jurmo, 1994b; Medina, April 28,1993; Young, 1993).

At least five other workplace education providers -- the University of Tennessee's Center for Literacy Studies, the New York State Education Department, LaGuardia Community College, the Suffolk County (NY) BOCES, and the Massachusetts Workplace Education Initiative -- have now adopted the workplace needs assessment concept and built it into proposals submitted to the NWLP in the spring of 1994.

Analyzing individuals' needs, interests, and abilities: Some practitioners are borrowing from the reading field -- particularly the whole language perspective -- and redefining what "individual needs assessment" should be assessing and how to go about doing so. Rather than see workplace literacy programs solely as a way of changing learners' work-related behavior, these practitioners argue that programs should be concerned with deeper learner beliefs and behaviors vis-a-vis literacy and learning. Otherwise, a learner might be able to master a few discrete job tasks but not develop a desire and ability to continue learning and applying literacy in other aspects of her life.

Mikulecky and Lloyd (1993), for example, have borrowed from researcher Susan Lytle to study "learner *beliefs* about literacy and themselves, learner literacy *practices,* the literacy *processes* employed by a learner while reading, and the *plans* a learner has which may involve literacy use" (p. 30). This is a major departure from functional context advocates' normal focus on job-related measures.

The Workforce Instructional Network, a NWLP project operating out of Southwest Texas State University in San Marcos in the early 1990s, developed a "collaborative portfolio approach" to "qualitative assessment." The Network argued that qualitative measures are a more valid way of helping fit curriculum to actual learner needs and of mapping learner growth for learners and other audiences than are traditional standardized tests. Rather than rely on numerical test scores, qualitative procedures

> . . . provide rich and detailed information about the learner's literacy abilities. Multi-dimensional in nature, the qualitative assessments attempt to provide a holistic picture of . . . abilities from many angles. They are designed to be more authentic -- more like the literacy tasks learners actually face -- than traditional tests . . . Since the qualitative asessments can be used flexibly to fit the learning situation, they allow instruction and assessment to be more closely linked. When used as self-assessment tools, they can help the learner develop metacognitive abilities that can lead to greater learning independence . . .(Johnson and McBride, 1993, p. 1).

A learner's portfolio would include both reading and writing scales. In the reading scale, the learner provides

> . . . a written or oral re-telling of (a chosen) text, . . . underlines main ideas and details within the text itself, and . . . answers literal, inferential, and application level questions. This variety of tasks provides multiple measures of that slippery construct, "reading comprehension," and thus aids in ascertaining some knowledge of a student's processing strategies (p. 1).

The Network's writing scales quantify writing *behaviors* (e.g., planning what to write, revising of one's own writing), *products of each step* of the process (e.g., originality, organization of the original outline), and the *final product* of the process (e.g., content, organization, and mechanics of the final draft).

The NWLP project at El Paso Community College (EPCC) has put considerable effort into developing a mix of assessment tools. Special effort has been made to create "seamless assessment," assessment integrated with instruction in a way which is not obtrusive and is regarded by the learner as another learning activity rather than a "test."

EPCC has experimented with a large number of data-gathering activities designed to (1) assess whether learners are developing the language strategies taught in the curriculum (via customized, "authentic/holistic" tools), (2) assess whether learners are making gains in "general" (non-curriculum-specific) skills (with a standardized test, (3) assess whether learners are transferring their skills to job-related tasks (via questionnaires and interviews with various stakeholders), and (4) get feedback from stakeholders about the course (via questionnaires and interviews).

After four years of developing, using, and refining various assessment and evaluation tools, a newly-reorganized staff evaluated these data-gathering activities in early 1994. The staff agreed that, if they were going to be promoting the notion of "Total Quality Management" to the companies they were working with, then the project itself should be managed in a TQM, high performance mode. They agreed that a key element of a high performance organization is "continuous improvement" through ongoing monitoring of progress and program needs. They decided that such monitoring would be done through the following activities:

Assessment of whether learners are achieving learning objectives imbedded in curriculum: Done through:

- Teacher observation sheets through which instructors observe learners in group tasks and rate their oral production and group process skills.

- Interactive check sheets in which learner and instructor monitor reading fluency, vocabulary, and strategies.
- Holistic writing scales in which instructors rate learners' progress according to several criteria.
- Learner self-assessment in which learners assess their abilities to perform selected job-related tasks.
- Dialogue journals in which learners describe how valuable the lesson is, how they are using what is taught, suggestions for future topics, etc.
- Videotaped interviews in which learners are taped using English at the beginning of the program for comparison to similar tapes at the end.
- Review of learner writings in which instructors rate learners' abilities to write about the topics discussed, make predictions about the possible results of a particular action, etc.

Assessment of whether learners are applying what they have learned to contextual tasks: Done through:

- Interviews with learners and management representatives.
- Review of job-related records.

Clarification of actions needed to improve the program: Done through:

- Interviews and focus groups with various stakeholders.
- Staff meetings.

Clarification of learning objectives: Done through:

- Interviews and focus groups with various stakeholders.
- Dialogue journals and other communications between participants and instructors.

(Jurmo, November 23, 1993, p. 16; Jurmo, May 1994).

REACH has contracted with the City University of New York (CUNY) to provide basic skills services to employees in several state-operated facilities in New York City. Goals for the program vary from site to site and worker to worker, and typically include a mix of job-related and personal-development objectives. There is a general consensus among stakeholders -- including management -- that the program should provide a "richer" kind of education, to challenge learners to engage in ongoing learning activities beyond focusing on skills required in particular job tasks.

CUNY staff recognize that, to be useful, instruction needs to focus on real needs. To clarify those needs, staff have developed a number of authentic assessment tools to identify learner interests and abilities. For example, an instructor brings in a sampling of books which she feels -- from prior experience -- that learners might have an interest in. (These include novels, biographies, history, and civil service practice books.) In an interview, the instructor asks the learner what kinds of materials he or she currently reads or might like to read, to get a sense of learner interests and behaviors.

The instructor might then give the learner a Gateway exam, in which the learner reads a particular passage until she reaches a point where she has trouble understanding it.

The instructor might then ask the learner to provide a writing sample. In the writing, the learner might describe what she has read, describe something about herself and her goals, or write an essay on one of three possible topics.

As instruction gets underway, the learner might use a checklist containing the topics which she and the instructor have agreed to cover. As she deals with each topic, the learner checks off whether the topic has been covered, not covered, or needs more review.

Learners store data from these various exercises in personal portfolios. The instructor has access to these portfolios and can in aggregate form summarize information for the entire group of learners. This summary can be presented to other stakeholders, as evidence of learner progress (Jurmo, April 25, 1994).

At Ohio State University, the Center on Education and Training for Employment has developed an approach to identifying workplace literacy needs which attempts to avoid the limitations of a traditional literacy task analysis. With the guidance of a facilitator, a selected group of workers from a particular job classification spends several days systematically analyzing their jobs to identify tasks performed, along with the knowledge, skills, and attitudes necessary to perform them. The team focuses in particular on the reading, writing, speaking, listening, computation, problem-solving, and decision-making skills required. The outcome of this process is a detailed analysis of the job along with enhanced self-confidence and analytical and team skills for team members. (The team's analysis is further validated and refined by other employees to whom it is shown.) Participating workers also emerge with an understanding of and sense of ownership for the education program which follows (Pritz and Imel, 1993).

Ottawa-based researcher Glenda Lewe has been a pioneer in literacy task analysis (LTA). She became concerned, however, that too often LTAs focused on identifying supposed worker deficiencies and -- in some cases -- those "deficiencies" were reported to employers. She concluded that LTAs can be done in two ways: one is structured and deficiency-oriented and the other is more flexible and (at least potentially) empowering.

She has more recently focused on developing the latter approach to LTA. She focuses on "strong" workers -- those commonly seen as already doing their jobs well. She analyzes what is needed to do the job rather than looking for who is "deficient."

She focuses on a cluster of jobs in which there is a possible path to promotion. For example, she might look at a cluster of carpentry jobs: carpenter apprentice, carpenter, and foreman. Within that cluster, she examines the incremental skills needed to go from one job to the next. Such an analysis identifies learning objectives workers might focus on to qualify for promotion (Lewe, 1993; G. Lewe, personal communication, April 8, 1994).

In 1993-94, REACH (with funding from the National Institute for Literacy) set out to develop a methodology for assessing the literacy needs of a range of workers (cleaners and custodians, nurses assistants, clerks, aides in a center for the developmentally disabled) in six New York worksites. Through ethnographic observation and interviews, the research team found that each site had its own culture and communication patterns.

The researchers also learned that most workers could already perform their current jobs satisfactorily and took pride in their work. Most of the workers also faced little paperwork in their jobs.

There were, however, some factors which might require workers to strengthen their basic skills. Some -- but not all -- workers wanted to be able to pass civil service exams for advancement. Some jobs were also being redesigned to require workers to take broader responsibilities and do more paperwork. And some sites were introducing "quality" initiatives requiring employees to speak up in team meetings and handle conflicts.

The researchers concluded that, to understand individual workers' needs, one must first understand the larger organizational context. To do so, the kind of upfront workplace (organizational) needs assessment described above (under "Analyzing organizational needs") is needed. Such a process, the researchers felt, would help all stakeholders clarify organizational and social factors which might support or inhibit learning and job performance. If this analysis indicated that a basic skills program might be needed, at that point individual needs, interests, and opportunities could be assessed (C. Young, personal communications,1993-94; Jurmo, April 25, 1994; Young, 1994).

Curriculum design: A number of programs are trying to create the collaborative learning model called for in Chapter I. These programs generally adopt the collaborative approaches to analyzing organizational and individual needs described here, along with team evaluation procedures.

In terms of developing collaborative instruction integrated with team management, only a few programs have gotten very far. Stein (1993) describes one program at United Electric Controls in Massachusetts in which the instructor trains program participants in how to serve as facilitators of learning and problem-solving activities back on the shop floor. Learning is thereby moved out of the classroom and into the hands of workers on the shop floor.

Jurmo (in press) describes another case in which a newly-hired instructor found that the functional context curriculum he was handed was essentially irrelevant. The curriculum had been designed more than a year earlier by outside consultants, and in the intervening period many of the job tasks imbedded in the curriculum had been eliminated from the company. The tasks covered in the curriculum which still existed in the company, the instructor learned, were for most participants irrelevant: the employees already had an acceptable mastery of those tasks and/or they were tasks which they simply were not interested in focusing on.

After trying to run the course for two weeks, the instructor decided to throw out most of the existing lesson plans and reconfigure the class as a decision-making team. He hoped that this would make sense to the learners and to the company, given the fact that the company was promoting many of the collaborative decision-making functions of "TQM." He asked participants what skills and knowledge they wanted to develop. They told him they wanted to know how to qualify for better jobs (within and outside the company) and how to further their education.

The instructor decided to re-organize the remaining eight weeks of sessions into team decision-making activities. Learners analyzed their own jobs and those of their supervisors, to identify what tasks and skills were required. They analyzed their own existing skills and knowledge, identifying what they had learned in their schooling, home life, hobbies, and jobs. They then summarized that information in resumes. They also identified and then analyzed particular problems they faced on their jobs (e.g., an inefficient freight elevator system) and mapped out action plans specifying problems, causes, and possible corrective actions.

The instructor emerged from this project with the sense that such a collaborative learning and decision-making process had great potential for the development of individual workers and their organization. Participants learned how to identify problems and learning goals and to analyze what was needed to solve those problems and meet those goals. In the process, they developed research, teamwork, and oral and written communication skills. They also produced concrete products (e.g., resumes and work-related action plans) which they could use to improve their own situations and workplace operations.

The Center for Literacy Studies at the University of Tennessee, the New York State Education Department, ABC CANADA, and LaGuardia Community College (in New York City) have recently developed proposals for similar team-learning projects integrated with continuous improvement and learning organization principles.

Evaluation: As stated under "Changing funding guidelines" above, the Massachusetts Workplace Education Initiative -- through its evaluation consultant Evaluation Research -- pioneered the development of team evaluation. The methodology first tried there has since been further refined in projects funded by the National Institute for Literacy in the U.S. and by ABC CANADA in that country. (This report is one of the products of the NIFL-funded project.) In both of these more-recent projects, the team evaluation process has been more deliberately linked to other program planning components and to the growing shift toward team management and learning organization models.

The Center for Working Life in Oakland, California developed a "participatory evaluation" model for the "worker-centered" education program it helped design in a Montana sawmill. Instructors and "peer counselors" -- selected program participants who served as liaisons between fellow participants and other stakeholders -- were trained in worker-centered principles and practices. They then developed a strategy and tools for gathering data to document program progress and needed improvements. The evaluation team interviewed all stakeholders, including teachers, several times during the program. Staff members were also asked to keep journals in which they wrote weekly summaries of high and low points, problems and solutions, and lessons learned. Evaluation team members were also available for consultation with staff on an as-needed basis. The resulting "feedback loop" fed information to education staff and other members of the multi-party Partnership Council which oversaw the program. Data were gathered via interviews, questionnaires, and meetings for various stakeholders, as well as from special journals kept by instructors (Atkin, 1993; L. Shore. personal communication, April 8, 1994).

In 199?, the New York State Education Department sponsored a series of workshops in which staff of its funded workplace education programs were exposed to the team evaluation model developed the previous year in Massachusetts. The coordinator of the NYSED workplace initiative hoped programs would use this methodology to generate more involvement of stakeholders at the site level. He also hoped that sites would produce evaluation reports which were more formative in nature -- detailing actions they planned to take to strengthen their programs -- rather than merely reporting attendance figures and test scores (Jurmo, March 1992; Jurmo, June 1993).

Staff from REACH (the education program for state workers described above under "Analyzing organizational needs") were among the participants in those New York State workshops. They eventually adopted the team notion in a major way. REACH staff felt that such an approach would provide the infrastructure of stakeholder support which programs need. REACH called the building of stakeholder support "site development," something as vitally important as good "curriculum development." In 1993 and 1994, REACH conducted team evaluations at two of its sites (I. Baumgarten, personal communication, June 21, 1994; Jurmo, April 25, 1994; Medina, October 7, 1993; Medina, February 18, 1994; Sperazi and Jurmo, 1994b).

As noted under "Changing funding guidelines" above, the Massachusetts Workplace Education Initiative has since 1991 encouraged its funded programs to take a team approach to planning and evaluation. Most recently, the Initiative received evaluation reports from seventeen site teams, an indication of the viability of this concept (Sperazi, 1994).

In 1993, the Connecticut Business and Industry Association used the team-based evaluation model developed in Massachusetts for the thirteen workplace basic skills programs under its direction. Funded through the NWLP, these programs are to prepare workers for the new demands of the high performance organization model. Evaluation teams in each site have been establishing appropriate evaluation criteria and gathering some data with the help of an external evaluator and the CBIA's coordinator. At present, the external evaluator is responsible for much of the data-collection and -analysis, but the hope is to involve evaluation teams more actively in all aspects of the evaluation process in future funding rounds (L. Sperazi, personal communication, May 17, 1994).

Professional development opportunities

The innovations represented above require professionals with particular expertise and vision. Many of those who have taken the lead in developing collaborative theory and practice have had to do so through experience -- by the seat of their pants -- and by scrounging around for guidance in reference materials, conferences, and grapevine contacts. Some of those involved in creating these new forms of workplace education have recognized that, if they want to share expertise and build an identity among like-minded professionals, they will have to create their own staff development opportunities.

The Massachusetts Workplace Education Initiative and the Texas Workforce Education Consortium are two statewide networks which have intentionally put the collaborative approach on the agendas of their annual conferences. Many of the practitioners and researchers mentioned in this report have been given opportunities to conduct workshops and make contacts at those events.

Two dozen "collaboration-oriented" workplace educators based in New York State, Massachusetts, Canada, New Jersey, and Maine have met several times in Albany and Boston in 1993 and 1994. In those meetings, they have updated each other on their respective projects, established a working set of principles to guide them, and identified several ways they might communicate and support each other in the future. These activities include establishment of an electronic bulletin board for information-sharing and follow-up conferences. These activities are seen as a vehicle for helping members of this informal network to refine and expand their own theory and repertoire of practices, while building a constituency of like-minded practitioners who might shape workplace education policy (Jurmo, September 1993; Jurmo, April 25, 1994; Jurmo, June 1994).

The Skill Builders is a consortium of workplace education providers in the Portland, Oregon area. It has developed a 26-week training program for adult educators and trainers interested in operating workplace basic skills programs. The course mixes theoretical and practical classroom activities with a three-month practicum. As such, it is one of the few attempts nationally to provide training specifically for workplace educators beyond a one-time, three-day workshop (W. Werbel, personal communication, April 29, 1994).

The Adult Literacy Resource Institute in Boston has since 1990 hosted two informal study groups of workplace educators. The eight members of one group meet periodically to discuss ethnographic studies of workplaces, in order to better understand workplace needs and explore how ethnographic research methods might be adapted for use by workplace educators. The second is a "teacher sharing" group in which workplace education instructors discuss instruction-related theory and practice (D. Rosen, personal communication, April 29, 1994).

Canadian researcher Glenda Lewe has prepared a paper for the National Center on Adult Literacy for workplace educators interested in working in a TQM workplace. She maps out the distinguishing characteristics of a TQM organization and identifies the implications of each for workplace educators. She argues that, if educators are not aware of both the opportunities and constraints of a TQM environment, they are likely to design inappropriate curricula and otherwise run into trouble (Lewe, in press).

Lewe advises workplace educators to familiarize themselves with TQM, by attending "quality" workshops and joining related organizations. She says that educators need to understand that a true TQM workplace doesn't do things piecemeal, but introduces a number of innovations simultaneously. Educators can also tap into educational institutions -- including many community colleges -- which are themselves adopting TQM practices and providing training around the issue.

Lewe notes that educators should look at health care in particular for an industry now adopting TQM in a major way. She says that TQM assesses success not by ranking individuals but by looking at performance of the overall organization. Workplace education evaluations might thereby be structured similarly (G. Lewe, personal communication, April 8, 1994).

In Canada, ABC CANADA (based in Toronto) and the Centre for Literacy (based in Montreal) have sponsored two four-day summer institutes for workplace educators in 1993 and 1994. The 1994 conference agenda focused in particular on "the collaborative approach to evaluation."

The ERIC Clearinghouse on Adult, Career, and Vocational Education at Ohio State University has recognized the emergence of the collaborative perspective described in this report as an alternative to the functional context perspective. The Clearinghouse has solicited reports and articles which can document the development of this perspective. Suitable materials will be included in the ERIC database, to enable others to learn from them (S. Imel, personal communication, February 18, 1994).

Emergent literature in support of collaborative learning

As described in Chapter I and elsewhere in this report, since approximately 1991 there has emerged from workplace literacy efforts a different way of interpreting "functional context." In this new view, "the workplace context" we should be trying to create is one which emphasizes not just technical efficiency and competitiveness, but collaborative decision-making, continuous learning, and a high quality of work life. "Being functional" in such a context means being an active participant in the creation of such a new way of organizing work. Those proposing this new interpretation of the workplace context argue that workplace educators now have to "rethink and restructure." That is, the field needs to rethink what it is education programs should be trying to accomplish. We then need to restructure education programs to reflect the principles and practices of that new workplace.

While some might assume that this new interpretation of contextualized learning has little in common with earlier interpretations, this is not the case, as illustrated in the following quotations from early advocates of the functional context perspective:

From Thomas Sticht (1991):

> Evaluation in the NWLP is not something that is accomplished at the end of a program development and implementation effort to "see if it worked." Rather, evaluation is an integral part of the original design of the program and an ongoing process that can permit decisions about how well the program is achieving one or more of the purposes of the NWLP and, where desirable, to improve the program and its value to adult

learners, other partners in the project, and the society at large (p. 3).

. . . it is not true that all aspects of productivity are directly mediated by literacy ability. . . if there is simply a blanket assumption that increasing literacy ability will increase productivity in some unspecified manner, it may not be possible to demonstrate that the program has, indeed, increased productivity (p. 5).

. . . program administrators and teachers are concerned with meeting the needs of their adult learners and partners. They are less concerned, if at all, with meeting the needs of federal funding agencies for information for decision making. . . (this) problem is compounded by the fact that . . . no none is satisfied that (existing standardized tests and oher assessment instruments) are actually obtaining valid infomation about "true" achievements. . . it is (thus) understandable why workplace literacy operators, teachers, and adult learners may be reluctant to submit to examinations that they feel are intrusive and nonrepresentative of what they are teaching and learning (p. 8).

. . . (outside evaluators indicate that what) is needed is *convincing evidence* that useful learning outcomes are being achieved . . . and that this new learning results in *improved productivity* in finding, retaining, performing, or advancing in a job in the workplace. While various types of ratings (e.g., supervisor ratings of increased productivity, teacher ratings of improvement, adult learner ratings of pre-and post-program increases in learning or productivity) provide useful indicators of the program's effects on learning and productivity, such ratings are not totally convincing. They are not free of the potential for self-deception that may bias ratings. It is the desire to overcome these kinds of subjective judgments . . . that lead . . to calls for "objective," "empirical," "measurable," outcomes of literacy learning and productivity (pp. 8-9).

The only way to know if growth has taken place is to measure the abilities at the outset of the program, and then again later on (p. 9).

(Evaluation) should be undertaken in the spirit of inquiry -- always questioning, seeking information, and using that information to modify programs to make them more effective Programs that seek to instill the love of lifelong learning in the workforce by starting learners off with the first steps into workplace literacy, should themselves exhibit positive attitudes toward learning -- learning what they are doing, how they are doing it, and what might be done to improve what they are doing. Programs that hope to make critical thinkers of others should become models of critical thinking themselves. Good evaluation requires critical thinking, continuous learning, and thorough documentation to permit others to properly place a high value on good works (p. 10).

From Jorie Philippi (1992):

America is trying to transition from outdated hierarchical work systems to quality-oriented, flattened organizations . . . the workplace has become a vast learning community with immediate and critical needs (p. 3).

The most successful . . . programs . . are built on actual job scenarios and . . . utilize job materials as a vehicle to teach the metacognitive and cognitive strategies that competent workers use . . . Instructional objectives are not content-specific, but rather focus on the thinking processes that are embedded in real-life job task examples with which workers are familiar. . . For the individual, (this) ensures that the instruction will be meaningful in terms of prior knowledge structures; using existing "mental hooks," or schemata, derived from work environment and experience to attach new information helps ease the process of assimilating old and new knowledge . . .(pp. 5-6).

Evaluation of workplace literacy programs should emphasize formative evaluation while including cyclical summative evaluations (based on the premise that the workplace will continue to experience accelerating change and training in new skill applications will be an ongoing need) (p. 8).

Evaluation of workplace literacy programs needs to measure program effectiveness independently, i.e., by comparing each actual program to its own stated goals, rather than comparing it to other programs. This is because each workplace literacy program designed in response to company and worker needs is unique; no two organizations have exactly the same set of critical job tasks to be addressed by instruction (p. 8).

By the mid-1970s, a new version of independent evaluation had developed, called "responsive evaluation" in which the evaluator is primarily concerned with program effects in relation to the interests and goals of the program "stakeholders" ... Responsive evaluation begins by identifying the goals each stakeholder group has for the program. This is followed by evaluator observations of program materials and implementation, which are compared to the various goal expressions. The evaluator identifies issues and concerns, collecting data to satisfy these with a variety of instruments. Collected information is organized into themes and issues, and concerns are matched to audiences. "Progressive focussing" can be used to systematically reduce the breadth of inquiry and concentrate attention on emerging issues. . . Responsive evaluation has potentially strong features for evaluating workplace literacy training because it attempts to take into account the interests of various groups of stakeholders, rather than just the program developers or sponsors, and collect data that meets their needs (pp. 8-9).

. . . programs should be viewed as an integral part of organizational training -- a long-term investment in the building of a highly skilled labor force. Evaluation design, as a part of such programs, needs to determine program effectiveness according to the value yardstickes that business and industry apply to training. Quality indicators, measures, and performance standards for individual programs need to be identified from the workplace community, rather than from educational environments (p. 9).

(Evaluations need to constantly search) for evidence each quarter that demonstrates the value of continuing the training program and looking for resources with which to expand it. For external providers or recipients of demonstration project funds, this requires diligent efforts to develop meaningful workplace program indicators that demonstrate invaluable impact on the organization as well as individual participants so that the program will be institutionalized, budgeted, and incorporated into company training on an ongoing basis (p. 13).

From Larry Mikulecky (1993 and 1994):

. . . program providers need to have clear goals for what they want to achieve in the limited time that learners are in class. They should also seek ways to extend this time beyond the classroom (Mikulecky and Lloyd, 1993, p. 93).

(Programs would ideally) anchor nearly all learning in a variety of meaningful contexts which range from workplace to reading for personal goals to preparing for further training . . . (part of) a life-long learning program (with) dozens of learning experiences . . . over several years . . . Most effective programs . . . draw upon every available opportunity for literacy, including workplace home, further schooling . . . (Mikulecky, 1994, p.5).

Interviews, analysis of memos and planning documents, and early program observations often reveal that significant differences about program goals exist among funders, supervisors, instructors, materials designers, and learners. Evaluation feedback during early program stages often initiates necessary clarification among program planners and participants. In some cases, goals are expanded, in some goals are refined, and in some new vendors are sought (Mikulecky and Lloyd, 1993, p. 16).

. . . goals for workplace literacy programs include improved learner literacy abilities, improved literacy practices at work and elsewhere, changed learner beliefs about literacy, self, and education, and improved learner productivity on the job (Mikulecky and Lloyd, 1993, p. 19).

Lytle . . . suggested that performance measures (tests and exercises) miss a good deal of important information about adult literacy learning. In addition to gains in literacy skills, adults may change in what they believe, in how they behave, and in their aspirations. . . Lytle's conceptual framework was adapted to the present workplace literacy project to test the importance of these aspects of adult learning and to seek ways to enhance learning (Mikulecky and Lloyd, 1993, p. 30).

It is possible for workplace lieracy programs to affect not only the learners' literacy levels and productivity on the job but also literacy in their families. Home literacy activities can both benefit the employees' children and increase the employees' literacy practice time . . . The effect of literacy programs on the children and families of workers is often neglected in evaluating program effectiveness, however (Mikulecky and Lloyd, 1993, p. 34).

It was not possible . . . to obtain data on the actual output of the individual employees involved in training . . . (because the) companies do not gather output data for units below that of the work-team . . . (Mikulecky and Lloyd, 1993, p. 45).

(Using employer-gathered productivity indicators) is not of great use if sample sizes are small and time between assessments is not very long (Mikulecky and Lloyd, 1993, p. 91).

(In one plant) supervisors had less education . . . and were less familiar with the concept of individual employee evaluation. Appointments between individual researchers and supervisors for the purpose of rating learners' job performance were cancelled for several legitimate reasons. As a result, supervisors sometimes rated employees without someone to remind them to think carefully about each scale. The resulting ratings seemed to reflect a desire to complete the task rapidly (e.g., many workers received exactly the same rating on each scale) (Mikulecky and Lloyd, 1993, p. 92).

Programs that draw learners from several different jobs may not be able to use supervisor ratings to assess impact on productivity. Unless jobs have several common tasks, it will not be possible to construct scales which can be used for all learners. If several different scales need to be constructed for several different jobs, the small number of learners in each job category is likely to preclude any meaningful statistical analysis (Mikulecky and Lloyd, 1993, p. 92).

The above quotations -- as well as other statements by the U.S. Department of Education quoted earlier in this chapter -- indicate that those commonly seen as proponents of a functional context perspective share many of the premises used by advocates of the emerging "collaborative" approach. These premises include:

- Stakeholders have a variety of expectations for programs. Programs need to find ways for stakeholders to negotiate and agree on feasible, meaningful goals, especially given the limited time available to programs.

- While stakeholders might hope for job-related outcomes, including such non-job-related uses of literacy as family-literacy activities in a workplace curriculum might encourage learners to put in more practice time outside the classroom. Such practice can generate learner interest in learning and other affective and cognitive characteristics required for any literacy activity.

- In their focus on impact on particular job tasks, workplace programs often overlook more-important, fundamental objectives. These include changing learner beliefs about self and literacy, changes in the strategies used to deal with print, and changes in the day-to-day ways the learner uses print.

- For several reasons, it is not easy -- and in some cases perhaps impossible -- to generate evidence of program impact on job performance. Reasons include: (1) companies don't keep data on individual job performance (records are for work units rather than individuals); (2) the length of programs is too short to produce significant change; (3) the size of learning groups is too small to permit meaningful statistical analysis of data; (4) improved job performance might be due to the Hawthorne effect of merely being paid attention to rather than to course content itself; and (5) supervisors sometimes don't understand the value or mechanics of rating individual workers' job performance.

- Rather than being a simplistic exercise to prove to funders that a program worked, evaluation should be seen as a means for helping all stakeholders understand, and invest themselves in a common effort to improve the organization and individuals. This "spirit of inquiry" is consistent with good adult education and organizational development practice.

It thus appears that proponents of functional context and collaborative approaches have significant things in common. This suggests that, rather than seeing these perspectives as mutually exclusive and adversarial, workplace educators might use these commonalities as focal points for further productive discussion.

Elsewhere in the adult literacy field

Workplace educators might learn from not only the other workplace educators described up to this point in this report, but from other adult literacy educators operating in non-workplace contexts. In particular, those advocating a collaborative approach to workplace education might study those who have been developing participatory approaches to assessment, evaluation, and general program design. Examples of such efforts are outlined below:

Alternative evaluation and assessment models

Lytle and Wolfe (1989) map out the approaches to program evaluation and learner assessment used by U.S. adult literacy programs. They analyze the strengths and limitations of each approach and identify the following ten recommendations for improving evaluation and assessment:

1. Program evaluation . . . should be conducted both externally and internally.
2. Program evaluation should be both formative and summative.
3. Program evaluation and learner assessment should involve learners and staff in a participatory process.
4. Questions for the design of program evaluation should be generated from theory, research, evaluation, and program practice.
5. Program evaluation should involve critical reflection on program philosophy and goals.
6. Program evaluation should give prominence to the processes of teaching and learning.
7. Evaluations should be designed to capture a range of learner and program outcomes.
8. Program evaluation and learner assessment require a variety of methods for collecting data over time.
9. To the extent possible, program evaluation and learner assessment should be integrated with program functions.

10. Program evaluation should be systematic and systemic, enabling stakeholders to make comparisons within and across programs and contexts (pp. 61-67).

Lytle and Wolfe also identify three purposes for evaluation:

> The first purpose is **accountability**, which some studies suggest should be a "mutual" accountability in which program sponsors and funders work collaboratively with program staff and learners to design and implement systems for evaluation that are interactive and that generate meaningful data appropriate to all levels of the system . . .
>
> The second purpose relates to the **improvement of practice** . . . Evaluation and assessment are forms of inquiry and staff development . . . In the field of adult literacy, learners can take a prominent role in discussions about program design and implementation and about staff development.
>
> The third purpose for evaluation is the **generation of new knowledge** about adult literacy education. Program-based evaluation studies and learner assessment can promote dialogue among practitioners within and across programs and can be further enhanced by relationships with consultants and evaluators from universities. Networks formed around issues and practices of evaluation are in a position to play a critical role in setting policy . . . (p. 68).

(For more on alternative literacy assessment, also see: Lytle, 1988; Lytle et al, 1989; Wolfe, 1988.)

Fingeret (1993) focuses on learner portfolios, one form of participatory assessment touched on by Lytle and Wolfe (1989). She defines portfolios "as a process as well as a product," (p. 3) in which learner and instructor analyze and document the learner's evolving interests, beliefs, and uses of literacy.

"The content of portfolios is limited only by our creativity and imagination" (p. 2). She quotes Valencia's (p. 339) statement that a portfolio can include "written responses to reading, reading logs, selected daily work, pieces of writing at various stages of completion, classroom tests, checklists . . . The key is to ensure a variety of types of indicators of learning so that teachers, . . . students, and adminstrators can build a complete picture of the student's development."

Fingeret expands on this list, as follows:

Portfolios can include examples of literacy practices outside of school, such as copies of drivers licenses, copies of the title pages of books that parents read to their children, copies of letters written to friends and family, and examples of math, reading and writing done in church, civic association meetings, or on the job. Portfolios can include copies of journal pages in which students discuss their learning (p. 2).

Fingeret says that "portfolio assessment has four major areas of reflection and decision-making, within each there are a number of steps; this is a cyclical process, however, rather than a linear one" (p. 3). The four stages of decision-making in Fingeret's process are summarized below:

<u>STAGE ONE: Decide whether portfolio assessment is consistent with your approach to instruction and assessment</u>.
The practitioner clarifies his or her beliefs about literacy, the teacher-student relationship, assessment, the relationship between assessment and instruction, and whether portfolio assessment is consistent with those beliefs.

<u>STAGE TWO: Plan portfolio assessment</u>.
The practitioner decides what areas to assess, what types of materials to collect as evidence, a schedule for developing the portfolios, criteria for selecting materials to include, the process for putting materials into the portfolios, and criteria and a process for assessing the contents.

<u>STAGE THREE: Implement portfolio assessment</u>.
The practitioner introduces the portfolio concept early on, if possible; and then implements the above process of collecting and assessing materials.

<u>STAGE FOUR: Evaluate the process and revise it for future use</u>.
With learners, the practitioner reflects on the process used and they revise it for future use.

This approach to individual assessment is remarkably similar to the collaborative evaluation process for workplace programs described above under "Changing funding guidelines" and "Evaluation." (See Sperazi and Jurmo, 1994a; and Jurmo and Folinsbee, 1994 for details of that process.) It also relates closely to the processes being developed for individual needs analysis in workplace programs as described under "Analyzing individuals' needs, interests, and abilities," above.

The participatory approach to literacy education

Since the mid-1980s, there has been a growth in interest within the U.S. literacy field in what has come to be known as a "participatory" approach to literacy education. In such an approach, programs are structured to provide opportunities for learners to play active roles in planning and implementing a wide range of activities more traditionally carried out by instructors and administrators. Learners thereby take on greater degrees of control, responsibility, and reward vis-a-vis program activities. Advocates argue that such an approach improves efficiency of program operations while promoting learners' personal development and their abilities to participate in the development of their communities and the larger society (Fingeret and Jurmo, 1989).

As stated in Chapter I, some literacy educators who have used a participatory approach in community settings have adapted participatory principles and practices for use in workplace education settings. A common element in both cases is the notion of shared decision-making. In community-based programs, the sharing is done primarily by learners and instructors; in workplace settings, the number of stakeholders is increased to include management and labor representatives, as well.

Some advocates of a functional context approach to workplace education have argued that the participatory approach developed in community settings has no place in a workplace. Such an interpretation of the participatory approach is presented below:

> *. . . notions of learner participation are exaggerated in workplace contexts.* In a company, they say, it's not just what learners want, it's what that company's mission, goals, and aspirations are. It's a bottom line issue. Workplace programs

must have an organizational perspective in addition to what learners need. "You can't apply Paulo Freire's theories of the oppressed in business and industry," says Sticht. "You can't say 'you're oppressing your workers and I'm here to empower them to overthrow your dictatorial management styles.' It won't work" (Business Council for Effective Literacy, January 1992, p.7).

Many of those advocating a collaborative alternative to the functional context approach would argue that this is a distorted view of the potential of adapting a participatory approach to workplace settings. Rather than seeing workers as hostile adversaries and discussion of workplace problems as a threat (as has been the case in many traditional, "Tayloristic" workplaces), those who have adapted participatory principles to workplace settings argue for a collaborative relationship between worker-learners and other stakeholders. In such a relationship, workers, managers, supervisors, union representatives, and instructors work together to analyze and improve the workplace. This is seen as an appropriate way of helping companies shift toward a team-based, continuous improvement management model.

Within other fields

In addition to communicating with those developing collaborative theory and practice in adult literacy programs operating outside the workplace, workplace educators might also investigate what participatory-minded professionals are doing in disciplines not directly related to adult literacy education. Outlined below are two such fields -- participatory action research and training and organizational development.

Participatory action research

Innovators in the field of social science research have, since at least the 1960s, worked to develop procedures which involve those affected by particular social problems in a process of reflection and action to solve those problems. These social science procedures do so by producing particular kinds of "products" and "processes." The "products" in this case are meaningful and reliable information which those affected by a problem can use to make the decisions necessary to solve the problem. The "processes" are evaluation and research activities which move those involved from being relatively passive "providers of information" to more-active "participants" in a problem-solving process.

The roots of this approach to social science research (which might be termed "participatory action research") go back to work done by anthropologists and sociologists in the 1940s and even earlier (L. Sperazi, personal communication, June 22, 1994). William Foote Whyte, one of the pioneers of this approach, described the logic behind involving informants as active participants, as follows:

> Long before the term became popular, social anthropologists and sociologists were carrying out projects which fit under the label of participant research. Anyone who serves as a participant observer in an organization or community for an extended period of time discovers that not all informants provide information and ideas of equal value. We always encounter one or two individuals who are especially knowledgeable, insightful and perceptive regarding the dynamics of their organization or community. We do not simply give such key informants standard interviews. It is useful to the researcher and more enjoyable to the key informant if we expand the social process to discuss with these individuals what we are trying to find out and also consult them about how to interpret what we study. Key informants thus become active participants in the research (Whyte, 1991, p.9).

Proponents of this approach suggested that participants not only be part of the process of analyzing problems they were facing but then also use that analysis to guide actions to solve those problems. This focus on using results for action challenged the traditional view that use or application of results would compromise the scientific legitimacy of what was learned.

However, proponents argued that social sciences should focus on <u>building</u> theories out of careful observation and analysis of human behavior rather than with <u>proving</u> already-existing theories. If applied to the workplace education field, this concept of "grounded theory" (Strauss and Corbin, 1990) would support an evaluation strategy which involves stakeholders in a careful analysis of what is needed and what practices seem to work best. Such analysis would thereby help workplace educators develop new theory, something especially vital in so new a field.

In the 1960s and 1970s, this approach was applied to evaluation of education programs. Kroenbach, for example, argued that courses should be improved through evaluation findings (Cronbach, 1963). Stake proposed "client-centered" and "responsive" evaluation, geared toward helping client groups solve problems (Stake, 1967). Guba argued for a "naturalistic" or inductive approach to educational evaluation (Guba, 1978).

Participatory evaluation is commonly used in international and community development as a tool for teaching people what they need to know to improve their programs and to further build community through collective reflection (Kindervatter, 1979; Kinsey, 1978; Lackey, Peterson, and Pine, 1981).

"Empowerment" evaluation is a relatively recent variation on the participatory research theme. As described by David Fetterman, 1993 president of the American Evaluation Association and a leading proponent of the concept, empowerment evaluation

> . . . is the use of evaluation concepts and techniques to foster self-determination. The focus is on helping people help themselves. This evaluation approach is problem focused, collaborative, and requires both qualitative and quantitative methodologies . . . In one form of empowerment evaluation, evaluators teach people to conduct their own evaluations and thus become more self-sufficient. It desensitizes and demystifies evaluations and ideally helps organizations internalize evaluation principles and practices, making evaluation an integral part of program planning. . . Evaluators can serve as coaches or facilitators to help others conduct their evaluation. They may also conduct the evaluation for the group, after the goals and evaluation design have been collaboratively established . . . (Fetterman, 1993, p. 115).

Minneapolis-based non-profit Rainbow Research follows this approach in the technical assistance it gives to community organizations. In its work with various organizations working on housing, domestic violence, and other issues, Rainbow Research has developed various "tools" (e.g., an evaluation "Toolbox," a "Program Self-Evaluation Tool") which stakeholders use to assess themselves.

The organization also produced a report on how to communicate evaluation findings "so that they get read *and* used." Special efforts are made to develop evaluation procedures which are appropriate to the culture, language, and prior academic experience of stakeholders. Evaluation is seen as a way of affirming stakeholders' strengths and identifying needed improvements, rather than judging stakeholders' deficits. Rainbow Research's "guiding principles" state, among other things, that

> Evaluation is most effective when it employs dialog, sharing of information, and concern for the long term rather than short term . . . and is most effective when (stakeholders) are collaborators in the evaluation process rather than objects of study (S. Ramirez, personal communication, April 20, 1994).

Training and organizational development

A number of organizations have been developed since the mid-1970s to provide technical assistance and an "identity" to those managers, union representatives, and others trying to transform workplaces in "high-performance" directions. These organizations have until now generally focused on aspects of organizational change other than employee basic skills, but this issue is increasingly being put on the agendas of their conferences and other activities.

Summarized below is information about a sampling of these organizations:

Association for Quality and Participation: AQP began in the late 1970s as the International Association of Quality Circles. Within eight years, members had realized that, to improve American workplaces, companies needed to go beyond introducing specific innovations like quality circles and instead change their broader management philosophy. At that point, the organization changed its name to the Association for Quality and Participation.

The not-for-profit organization provides information and technical assistance to human resource directors, quality engineers, and others responsible for training employees to prepare them for workplace change. AQP promotes a team-problem-solving approach to training, in which participants learn together and make decisions based on information they generate. The goal of such training is to help workplaces transform themselves to contexts in which labor and management work in self-directed teams to create knowledge and make decisions.

AQP sees this work as a "cross between a professional and social movement." The association has 10,000 members in 80 chapters, most of which are in North America. It collects and disseminates information via conferences and printed materials. (J. Jones, personal communication, April 6, 1994).

Ecology of Work is a yearly series of conferences showcasing innovative attempts to re-design workplaces. Human resource directors, production managers, and union leaders hear from and analyze workplaces attempting to implement "statistical process control," "re-engineering," "work-redesign," "TQM" and related concepts. One conference is held in Canada, another in the United States, the third in Europe, and the fourth -- for union representatives -- in various locations (J. Newman, personal communication, June 21, 1994).

Labor studies centers at a number of U.S. universities are doing research and providing technical assistance related to workers' roles in the changing workplace. In some cases, they are looking in particular at the roles of worker basic education and other training within these changes. These centers are coordinated by the University and College Labor Education Association, whose chair is Susan Schurman, director of the Rutgers University Labor Education Center (S. Schurman, personal communication, April 12, 1994).

The National Workforce Assistance Collaborative is a five-year project funded by the U.S. Department of Labor to provide technical assistance in the areas of workplace literacy, technical training, work-restructuring, and labor-management relations. Assistance will be given to "intermediary organizations" serving small and medium-sized businesses. In its first year (1993-94), the Collaborative is analyzing needs of these businesses and intermediary organizations. This analysis will produce case studies of ten high-performance organizations, a report on new labor-management structures, a guide showing intermediary organizations how to serve high performance workplaces, a conference on work restructuring, and a report on that conference. The project is headed by the National Alliance of Business. Other partners include the American Society for Training and

Development, the Institute for the Study of Adult Literacy at Pennsylvania State University, the Maryland Center for Quality and Productivity, and the National Association of Labor Management Committees.

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Chapter 5

WHAT WE CAN DO TO DEVELOP APPROPRIATE EVALUATION PRACTICE

Key stakeholders in the workplace education field have much to learn from good work done to date and much work to do to develop the field further. Workplace educators, employers, unions, funders and policy makers, workers, and others need to study, clarify their values, develop action plans, build constituencies, get resources, do research and development, break down old barriers, and practice the collaborative learning and problem-solving we want workplaces to adopt.

The preceding four chapters indicate that the stakeholders involved in workplace education programs have different ideas about what those programs should accomplish. The "functional context" approach became a standard for many programs since the later 1980s, and many interpreted this to mean programs should focus primarily on reading tasks which learners face on their current jobs, as defined by education experts and higher-level managers.

More recently, workplace educators have developed an alternative interpretation of contextualized learning, one they feel is more in keeping with the shifting of workplaces to a team management model. In this new, "collaborative" model of workplace education, more responsibility for the learning process is placed in the hands of workers, and programs are planned, implemented, and monitored by teams composed of learners and other stakeholders.

Just as the overall models for workplace basic skills education have been evolving, so have the approaches used to evaluate them. Until recently, programs have tended to rely on some combination of informal, internal monitoring and more formal evaluation by an "outside expert." Those advocating a collaborative approach to programming have placed greater responsibility for evaluation in the hands of learners and the stakeholder teams which manage the program. In so doing, all stakeholders are to get a greater understanding of and ownership for the program, and be able to respond quickly to program needs.

Chapter 4 describes workplace educators who have taken a lead in developing the collaborative approach. They are revising funding guidelines; developing new assessment, curriculum, and evaluation tools; creating new opportunities for staff development; and building a constituency for workplace education. Also described are others outside the workplace education field per se -- literacy educators, social scientists, and organizational development and training specialists -- who are developing tools of possible use to workplace literacy specialists.

Those supporting the creation of new approaches to workplace education now have like-minded people and other resources to work with and, therefore, reason to be encouraged. However, much more work must be done to build on the foundation of theory and practice which is being put in place. Presented below are some tangible steps which key stakeholders might take to support these developments:

Workplace educators

"Workplace educators" include both service providers and researchers. They might:

1. Do some reading. On your own, study what others are already doing to create new and improved approaches to workplace education. Read the sources cited in this report. Recognize the "paradigm shift" now going on in the world of organizational development and re-think how workplace education might play a role in that shift.

2. Learn from others. Talk with others doing this work to get guidance on questions you might have and share your own experience. Participate in conferences where these issues are discussed. Create new learning opportunities for yourself by organizing your own conferences, E-mail, or other means of communicating with others with similar interests.

3. Clarify your values and goals and develop an action plan. Based on the above investigations, clarify your own values and goals related to workplace education. Rather than see workplace education as inherently limited to job-specific goals, recognize that

workplace education is one of the few contexts where adult learners might have a chance to develop critical thinking and other important skills they didn't develop in schools or other community institutions. Map out an action plan detailing where you want yourself and your institution to go in the coming years. Be clear about kinds of services you want to provide and the staff development, funding development, and other steps you'll need to take.

4. Build a constituency. Workplace literacy education needs more resources. We have few friends in high places. We thus need to organize ourselves, demonstrate what we can do, and be prepared to exert influence to shape policy and funding to get the resources we need. When communicating with others, focus not only on strengthening your practice but on building a constituency for advocacy purposes. Also see this as an opportunity to exchange peer support with others who might be out there on their own trying to develop new practice.

5. Get resources. Collectively, make a case to funders and policy makers, to get them to support growth of our field rather than regurgitation of limited kinds of practice. Individually, look for new sources of support and make a similar case for good quality workplace education in funding proposals, in presentations to business and union representatives, and in other forums.

6. Do research and development. Plan and carry out new approaches to workplace needs assessment, individual assessment, curriculum design, evaluation, and other components of a solid program. Document and critically analyze what you are doing and disseminate your findings to others, to strengthen your own practice and that of others. Don't be afraid to compare what you are doing with other models, as well. If we don't honestly and critically evaluate ourselves, our ideas will remain untested rhetoric, not something others should put much faith in. Use this experience to build your expertise, so you have a foundation to work from.

7. Break down old barriers. Be willing to challenge your old assumptions, try new ideas, and communicate with others (from other fields or other philosophical orientations) with whom you don't normally communicate. For example, participate in TQM training or investigate how the larger field of evaluation has dealt

with many of the issues now facing workplace educators. Also, rather than think of evaluation and assessment as separate entities or distracting requirements, see them as central parts of the overall learning process of which "basic skills classes" are only one part.

8. Practice what we preach. If we are trying to get others to invest in ongoing learning, work in teams to communicate and make decisions, and create "learning organizations," we should do likewise. Re-structure your program or department along collaborative lines. Create new networks of others interested in similar issues. The above activities are additional ways of doing so, as well.

We should also be willing to take some risks, just as we are asking learners, employers, union representatives, and funders to do when we ask them to invest in workplace education. We need to be willing to "stretch" ourselves, try new ideas, and stand up for what we believe in.

Employers

"Employers" are management representatives concerned about employee basic skills issues. They are not monolithic vis-a-vis the employee basic skills issue. They include production managers concerned primarily about job performance company-wide, human resource managers who focus more on employee morale and job satisfaction across departments, and on supervisors who are responsible for both production and human resources issues in their particular departments. Each has a different reason for being concerned. Here are some things you as management representatives can do:

1. Dc some reading. On your own, study what others are already doing to create new and improved approaches to workplace education. Recognize that, just as companies are changing, workplace education providers are likewise changing how they do things. Read the sources cited in this report -- and others -- to familiarize yourself with what others have been saying and doing about workplace education. Consider how workplace education might play a role in the "paradigm shift" now going on in North American workplaces.

2. Learn from others. Talk with others -- employers, educators, union representatives -- doing this work to get guidance on questions you might have and to share your own experience. Talk with others within your own state or industry as well as elsewhere. Participate in conferences where these issues are discussed. Create new learning opportunities for yourself by working with others (e.g., the local Chamber of Commerce, university, adult education program) to organize your own meetings or other means of communicating with others with similar interests and questions.

3. Clarify your values and goals. Based on the above investigations, clarify your own values and goals related to human resources and workplace education. Why are you now thinking about this issue? What kind of organization are you trying to create? What at this stage might a worker education program accomplish for your organization?

4. Conduct a workplace needs assessment: With the help of an adult education provider, conduct an organizational needs analysis to clarify how employee basic skills "fits" into your organization's larger plans for productivity and quality of work life.

5. Get resources. With others in your industry, community, or state, make a case to funders and policy makers, to get them to support growth of our field. Individually, look for new sources of support and make a similar case for good quality workplace education in funding proposals, in presentations to business and union representatives, and in other forums.

6. Do research and development. Don't expect everything to be totally clear and to work perfectly the first time you get into the workplace education issue. Take a systematic "R&D" approach as you would with other innovations. Do careful analysis of your organization's and individual employees' needs. If a basic skills initiative is warranted, plan and implement it carefully. Document and analyze what you are doing and disseminate your findings to others, to strengthen your own practice and that of others.

7. Break down old barriers. Be willing to challenge your old assumptions, try new ideas, and communicate with others (from

other fields, other philosophical orientations, or other geographic areas) with whom you don't normally communicate.

8. Practice the values you promote elsewhere in your organization. If you are trying to promote critical thinking, quality, teamwork, and "learning organization" principles in your organization, consider how you might apply those same principles to planning of a workplace basic skills program. The preceding seven suggestions present possible ways of doing so.

Unions

"Unions" are labor organizations whose mission is to ensure a high quality of work life and other rights for workers. Historically, union representatives have been leaders in promoting the "quality of work life" perspective on workplace education described in Chapter I.

1. Do some reading. On your own, study what others are already doing to create new and improved aproaches to workplace education. Read the sources cited in this report -- and others -- to familiarize yourself with what others in unions and other institutions have been saying and doing about workplace education. Consider how workplace education might play a role in enabling workers to participate actively in shaping the "paradigm shift" now going on in North American workplaces.

2. Learn from others. Talk with others -- union representatives, educators, and employers -- doing this work to get guidance on questions you might have and to share your own experience. Talk with others within your own state or industry as well as elsewhere. Participate in conferences where these issues are discussed. Create new learning opportunities for yourself by working with others (e.g., the state AFL-CIO, university labor-studies departments, adult education community) to organize your own meetings or other means of communicating with others with similar interests and questions.

3. Clarify your values and goals. Based on the above investigations, clarify your own values and goals related to workplace education. Why are you thinking about this issue? What are you trying to accomplish for the workers you serve?

What roles might a worker education initiative play in your larger efforts?

4. Conduct a workplace needs assessment: With the cooperation of your company's management and with the help of an adult education provider, conduct an organizational needs analysis to clarify how employee basic skills "fits" into the company's larger plans for productivity and quality of work life.

5. Get resources. With others in your industry, labor community, local community, or state, make a case to funders and policy makers, to get them to support growth of our field. Individually, look for new sources of support and make a similar case for good quality workplace education in funding proposals, in presentations to union and business representatives, and in other forums.

6. Do research and development. Don't expect everything to be totally clear and to work perfectly the first time you get into the workplace education issue. Take a systematic "R&D" approach as you would with other innovations. Do careful analysis of the needs of your workplace and individual members. If a basic skills initiative is warranted, plan and implement it carefully. Document and analyze what you are doing and disseminate your findings to others, to strengthen your own practice and that of others.

7. Break down old barriers. Be willing to challenge your old assumptions, try new ideas, and communicate with others (from other fields, other philosophical orientations, or other geographic areas) with whom you don't normally communicate.

8. Practice the union values you promote elsewhere. If your union promotes the value of organizing and collective action as means to effecting change, consider working collaboratively to create a solid constituency and resource base for high-quality worker education. The preceding seven suggestions present possible ways of doing so.

Funders and policy makers

"Funders and policy makers" in this case include local, state, and federal agencies giving funds and shaping guidelines for workplace education. This category also includes private-sector funders (for example, foundations, labor organizations, trade associations) of workplace education programs and policy institutes which shape policy for the field. For some funders and policy makers, the following recommendations will be "on target." Others will already have carried out some or all of the recommendations.

1. Do some reading. On your own, study what others are already doing to create new and improved aproaches to workplace education. Read the sources cited in this report -- and others -- to familiarize yourself with what others have been saying and doing about workplace education. Go beyond the sources and thinking commonly cited by funders and policy makers and study some of the new thinking and forms of practice which have emerged from research and development in the 1990s.

2. Learn from others. Talk with others -- employers, educators, union representatives -- doing this work to get updated views not necessarily captured in the literature. Participate in conferences where these issues are discussed, but not necessarily in the "top-down" role commonly expected of funders and policy makers. That is, rather than allowing yourself to be placed on a podium in the role of source of knowledge and money, create situations where there can be more of a genuine dialogue. In such forums, ask for ideas and feedback from the field and be available to respond. Do this in the same spirit of continuous improvement and continuous learning which we are now asking others to adopt.

3. Clarify your values and goals. Based on the above investigations, update your own values and goals related to workplace education. Has your thinking on this issue changed? If so, why? Are you now considering some of the arguments and experience gained in the field in recent years, or are you stuck with the same thinking which policy makers put in place when workplace education first got rolling in the mid-1980s? Should the field be shoring up old workplaces or creating new ones?

Re-consider what your role in the field should be. Are you a "dispenser of gifts" or an active partner in the field? Do you tell others what to do or listen to what the field says it needs and work with the field to shape policy through collaborative decision-making?

4. Re-think what programs might accomplish and what they need to do so. Move away from focusing workplace education so heavily on limited tasks like "reading of manuals." Consider other focal points like "collaborative decision-making," "generating interest in lifelong learning," and "oral communications in a multicultural environment."

Reconsider how program impact is measured. (Don't think only in terms of "numbers" and "changing individuals." Look for more-authentic evidence of impact on learners. And see whether the organization is changing, too.)

See "curriculum" not as a set of "materials" to be taught to everyone in a "class." See it instead as a process in which learners, instructors, and other stakeholders continually set goals, carry out learning activities, and monitor progress. A curriculum might have many different types of learning activities, some very individualized. See "curriculum" -- an ongoing process of setting learning goals and finding ways to achieve them -- as the thread which holds the "learning organization" together.

5. Revise guidelines and get more resources. With other stakeholders from business, labor, education, and other sectors, revise your funding guidelines for workplace education programs to reflect feedback from the field. Don't allow funding to be used for quick fixes which don't produce lasting benefit for individual workplaces or the field as a whole. Recognize that investment in pilot programs is now paying off, and continue to find public- and private-sector resources to support effective research and development.

Rather than feeling compelled to fund large-scale, longer-term projects, funders might consider issuing smaller grants to local partnerships to enable them to first carry out careful workplace needs aseessments. Based on the results of those assessments, funders can then decide whether a basic skills program is truly warranted.

Promote private-sector investment in pilot projects (like the special projects carried out by the banking, printing, and home-building industries) in funding guidelines, in presentations to business and union representatives, and in other forums.

6. Do research and development. Recognize that research and development done to date is producing good evidence which others can now learn from. If you are funding demonstration projects, encourage some real experimentation rather than

requiring all programs to fit one particular mold. Encourage creative solutions to the problems the field has now identified. Be sure that those results get disseminated in effective ways rather than being filed away. (Consider funding a new organization like the Business Council for Effective Literacy, which focused on prompt, customized dissemination of information.) Create opportunities (e.g., workshops, study groups, networks, E-mail, newsletters) for practitioners to study others' experience and document and learn from their own.

7. Break down old barriers. Be willing to challenge your old assumptions, try new ideas, and communicate with others (from other fields, other philosophical orientations, or other geographic areas) with whom you don't normally communicate. Open up communication within the field by funding conferences, newsletters, and electronic communication. Look beyond "turf" and the personalities of those involved in the field and think more deeply and creatively.

8. Practice the values you promote elsewhere. If you are now encouraging the workplace education field to think in terms of "quality," "long-term investment in education," "teamwork," and "critical thinking," then you might consider how you might apply those same principles to your own operations and to your relationship with others in the field. The preceding seven suggestions present possible ways of doing so.

Workers

Workers aren't normally thought of as active participants in the workplace education field. Instead, they are too often seen as "recipients" of services provided by others.

Those normally considered providers of those services -- educators, employers, and unions -- might now find new ways of encouraging workers (especially those who have now participated in workplace education programs) to become more involved in developing the field. Workers would do so not only for themselves but for the many other fellow workers who might benefit.

Here are some ways in which workers might get involved:

1. Enable learners to communicate with other learners. In some workplace education programs, there are few opportunities for learners to communicate with other learners in the same class or in other classes being provided. In such a case, "student councils" or "learner forums" might be established to enable learners to discuss education-related issues. They might, for example, clarify what they hope programs will accomplish, what they like about programs and what they don't, what they and others can do to support worker education, and what learners can do to pursue further educational and job opportunities. Similar forums might be set up to enable learners from various worksites or from local community-based programs to communicate, as well. Such communication channels have already been established by community-based literacy programs, to enable learners to provide peer support and shape program policy. If community-based programs can do it, why not workplace programs?

2. Enable learners to communicate with other workers. Participants in workplace education programs might be given opportunities to speak about education issues with other workers not currently involved in any education program. Learners can explain the benefits of participation and suggest ways in which other workers might get involved, either as participants and/or as supporters of the program.

3. Involve learners in policy development. Participating workers can play valuable roles in shaping workplace education policies of their employers, their unions, and outside funding agencies. They can do so by participating in workplace education meetings and conferences, public hearings, and news coverage; writing letters; and inviting internal and external policy makers to visit classes.

4. Involve learners in staff development. Learners can serve as resource persons in staff development activities. They can help set criteria for selection of education staff, participate in staff selection and training activities, and give feedback about staff performance.

5. Involve learners in design and implementation of curricula. Learners can be encouraged to play active roles in all stages of designing and implementing instructional activities. They can help clarify learning objectives, serve as peer-instructors, and

otherwise be seen as active participants in learning rather than passive recipients.

6. Involve learners in program evaluation. Learners can give valuable input into program evaluations, especially when those evaluations are carried out by site teams composed of a range of program stakeholders.

In conclusion

The workplace education field now has had more than ten years of experience to learn from. We are identifying new needs and opportunities for workplace learning and developing new program models and practical tools. In the process, we are questioning old assumptions, refining some of them and setting some aside altogether.

There is a danger that, rather than seeing these developments as opportunities for creating a new and improved field, we will set up camps organized around the thinking we feel most comfortable with. If that happens, we will fail to make use of the learning opportunities which the last ten years have provided us with.

Instead, we need to foster an ongoing dialogue in which we can critically examine what we are doing, learn from it, and create new ways of thinking and practice. Those who might feel a bit worn out from the flurry of the past ten years should also encourage newcomers to be part of that dialogue.

Jorie Philippi acknowledged the need to look for new solutions as follows:

> Workplace literacy, although quickly burgeoning, is still a new field. There are still no "givens" in an organization's literacy problems, no pat solutions, no panaceas, and no quick fixes for sale in boxes off the shelf (although some opportunists would have us believe there are). Each practitioner must be willing to commit to the difficult job of seeing the problem, carving out new solutions based on sound learning theory, collecting proof of effectiveness for each organization, and disseminating the results. Only with hard data gathered from a variety of program models, techniques, and users can we begin

to draw universal conclusions and set national policy about best practices (i.e., processes) to apply when solving workplace literacy problems.

The workplace is not a static environment; the rapidly accelerating changes that affect it also affect the problems and solutions that arise concerning workplace literacy. We need practitioners who aren't afraid to seek out ever-changing messes, name them, define them, research them, and clean them up (Business Council for Effective Literacy, July 1993, p. 10).

REFERENCE

Business Council for Effective Literacy. (July 1993). Once around the table: Adult literacy, to secure its future. BCEL Newsletter, p. 10.

APPENDIX:

Key organizations and individuals cited in this report

ORGANIZATIONS

ABC CANADA
1450 Don Mills Rd.
Don Mills, Ontario M3B 2X7
416/442-2292
Contact: Sue Folinsbee

Adult Literacy Resource Institute
989 Commonwealth Ave.
Boston, MA 02215
617/782-8956
Contact: David Rosen

Applied Behavioral and Cognitive Sciences, Inc.
2062 Valley View Rd.
El Cajon, CA 92019
Contact: Thomas Sticht

Association for Quality and Participation
801-B West 8th St.
Cincinnati, OH 45203
513/381-1959
Contacts: Joanne Jones and Sara Olberding

Center for Working Life
3814 SE Martins St.
Portland, OR 97202-7645
503/774-6088
Contact: Lee Shore

Center on Education and Training for Employment
(See ERIC Clearinghouse.)

City University of New York
Office of Academic Affairs
555 W. 57th St.
Room 1512
New York, NY 10019
212/794-5556
Contact: Ann Heininger

Civil Service Employees Association
1 Lear Jet Lane
Ste. 3
Latham, NY 12110-2393
518/785-4669
Contact: Ira Baumgarten

Connecticut Business and Industry Association
(See Evaluation Research, below.)

Ecology of Work
c/o Conference Support Systems Unlimited
Box 44A
Northwood, NH 03261
603/942-8189
Contacts: Tom Chase and Jan Newman

El Paso Community College
The Literacy Center
PO Box 20500
El Paso, TX 79998
915/534-4617
Contacts: Ann Savino, Roland Chanove, and Kay Taggart

ERIC Clearinghouse on Adult, Career, and Vocational Education
1900 Kenny Rd.
Columbus, OH 43210-1090
800/848-4815
Contacts: Susan Imel, Sandra Kerka, and Sandra Pritz

Evaluation Research
130 Warren St.
Newton Center, MA 02159
617/527-6081
Contact: Laura Sperazi

Literacy Partnerships
14 Griffin St.
East Brunswick, NJ 08816-4806
908/254-2237
Contact: Paul Jurmo

Massachusetts Workplace Education Initiative
Mass. Dept. of Education
Adult & Community Learning Services
350 Main St.
Malden, MA 02148
617/388-3300, Ext. 430
Contact: Mr. Johan Uvin

National Workforce Assistance Collaborative
c/o Institute for the Study of Adult Literacy
Pennsylvania State University
204 Calder Way, Suite 209
University Park, PA 16801-4756
814/863-3777
Contact: Eunice Askov

National Workplace Literacy Program
U.S. Department of Education
Office of Vocational and Adult Education
Division of Adult Education and Literacy
Washingto, DC 20202-7240
Contact: Sarah Newcomb

New York State Education Department
Education Bldg., Room 315
Albany, NY 12234
518/474-5506
Contact: Robert Knower

New York State Governor's Office of Employee Relations
Corning Tower, 23rd Floor
Albany, NY 12223
518/474-6704
Contact: Diane Wagner

Rainbow Research
621 West Lake St.
Minneapolis, MN 55408
612/824-0724
Contact: Steven Mayer

REACH
(See New York State Governor's Office for Employee Relations and Civil Service Employees Association.)

The Skill Builders
Portland Community College
PO Box 19000
Portland, OR 97280
503/244-6111, ext. 6287
Contact: Wayne Werbel

Texas Workforce Education Consortium
(See El Paso Community College.)

University and College Labor Education Association
c/o Labor Education Center
Rutgers University
Ryders Lane and Clifton Ave.
New Brunswick, NJ 08903
908/932-1748
Contact: Susan Schurman

University of Tennessee
Center for Literacy Studies
2046 Terrace Ave.
Knoxville, TN 37996-3400
615/974-4109
Contact: Juliet Merifield

Workforce Instructional Network
Southwest Texas State University
601 University Dr.
San Marcos, TX 78666-4616
512/245-8142
Contacts: Jonathan Engel and Pamela McBride

INDIVIDUALS

Judith Alamprese
COSMOS Corporation
1735 Eye St., NW
Ste. 613
Washington, DC 20006
202/728-3939

Kathryn Chang Barker
Canadian Labour Force Development Board
23-66 Slater St.
Ottawa, ON K1P 5H1
Canada
613/230-6264

Hanna Fingeret
Literacy South
Snow Building, Rm. 202
331 W. Main St.
Durham, NC 27701
919/682-8108

Sue Folinsbee (Waugh)
(See ABC CANADA, above.)

Sheryl Gowen
Asst., Director
Center for the Study of Adult Literacy
Georgia State University
University Plaza
Atlanta, GA 30303-3083
404/651-2405

Glynda Hull
National Center for Research in Vocational Education
University of California at Berkeley
1995 University Ave., Ste. 375
Berkeley, CA 94704

Susan Imel
(See ERIC Clearinghouse, above.)

Sandra Kerka
(See ERIC Clearinghouse, above.)

Glenda Lewe
Glenda Lewe Consulting
530 Laurier Ave. West
Suite 2301
Ottawa, ON K1R 7T1
Canada
613/233-3783

Susan Lytle
National Center on Adult Literacy
University of Pennsylvania
3910 Chestnut St.
Philadelphia, PA 19104-3111
215/898-2100

Muriel Medina
Workforce Learning Associates
1601 Onondaga St.
Syracuse, NY 13204
315/475-8640

Larry Mikulecky and Paul Lloyd
School of Education
Indiana University
361 N. Jordan
Bloomington, IN 47405
812/332-0211

Jorie Philippi
Performance Plus Learning Consultants, Inc.
7869 Godolphin Drive
Springfield, VA 22153

Sandra Pritz
(See ERIC Clearinghouse, above.)

David Rosen
(See Adult Literacy Resource Institute, above.)

Tony Sarmiento
Asst. Director for Education
AFL-CIO
815 16th St., NW
Washington, DC 20006
202/637-5144

Katherine Schultz
National Center for Research in Vocational Education
University of California at Berkeley
1995 University Ave., Ste. 375
Berkeley, CA 94704

Susan Schurman
(See University and College Labor Education Association, above.)

Lee Shore
(See Center for Working Life, above.)

Laura Sperazi
(See Evaluation Research, above.)

Sondra Stein
National Institute for Literacy
800 Connecticut Ave., NW
Ste. 200
Washington, DC 20202-7560
202/632-1500

Thomas Sticht
(See Applied Behavioral and Cognitive Sciences, above.)

Maurice Taylor
Associate Professor
University of Ottawa
Faculty of Education
145 Jean-Jacques Lussier
Ottawa K1N 6N5
613/564-5439

Marcie Wolfe
Director, Adult Programs
Institute for Literacy Studies
Lehman College
Bedford Park Blvd. West
Bronx, NY 10468
212/960-8758

Carol Young
Carol Young & Associates
379 Wellington Rd.
Delmar, NY 12054
518/475-1380