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ABSTRACT
                A project was undertaken to develop a guide to help
small business programs select good education and training programs
for their staff. An initial step was a review of literature related
to adult education and training in small business and training
evaluation. The initial plan was to have the guidebook be specific to
a given industry or other appropriate group. Four different criteria
and three different ways of choosing a critical category of program
were considered. However, the advisory committee decided upon a
broader guidebook that would: help small businesses select a training
program from outside vendors; not be specific to a particular type of
training program; and not be limited to certain types of providers.
Training and education programs offered by large national companies,
small local vendors, community colleges, and training consortia were
analyzed, and focus groups were conducted with small business
personnel with respect to their current training practices. The
guidebook that was developed consisted of three sections: training
needs analysis; guidelines for selection; and evaluation. Reaction
from a field test showed that some liked it very much and felt it
would be very useful, whereas others felt it was too simplistic. The
guidebook was determined to be useful for the small business person
who was not a training professional at a firm that was actually
seeking training for its staff. Dissemination options were
investigated. (A program evaluation checklist is appended. Contains
52 references.) (YLB)

American Institutes
for Research

CE

Education, Retraining and Workplaces

Final Report

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Daniel B. Felker

November 30, 1993

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Chapter 1. Introduction

The purpose of this contract was to develop a guide to help small business programs select good education and training programs for their staff. A guidebook has been developed that is ready for publication and distribution to the target audience. The steps taken in fulfilling this purpose were not always exactly the steps laid out in the original proposal. The original plan was modified based on information collected by the American Institutes for Research and input from the Advisory Committee. In this final report we will describe the work that was actually completed in developing the guidebook and discuss some of our conclusions and recommendations for further work in this area.

The project Advisory Committee consisted of both experts in the education and small business fields, as well as representatives who were working adults. The committee had three meetings and guided the project at every stage. The members were:

Gary Andrews, small business representative
   Human resource director with Pulsecom Hubbell, Inc., Herndon, VA

Laurie Bassi, Ph.D., labor economist
   Professor in the Department of Economics, Georgetown University

Miriam Burt, union representative
   Analyst with the Food & Beverage Workers Union Local 32, Washington, D.C.

John Henderson, working adult and small business representative
   Machinist with Garland Laboratories, Silver Spring, MD

Philip A. Jury, Ph.D., organizational development specialist
   President of SPR, Minneapolis, MN

Stuart Rosenfeld, Ph.D., small business expert
   President of Regional Technology Strategies, Inc., Chapel Hill, NC

Anthony Sarmiento, union representative
   Manager with HRDI, AFL-CIO, Washington, DC 20006

Gail Spangenberg, workplace literacy expert
   Vice President of the Business Council for Effective Literacy, Inc., New York, NY

Lilburn Williams, small business representative
   President of Williams Associates

Susan Zapolski, working adult
   Research Analyst, U.S. Postal Service, Washington, D.C.

The original proposal called for six tasks to be completed:

1. Form an Advisory Committee
2. Review the literature
3. Develop a framework
4. Collect data
5. Develop and validate the model
6. Prepare guidelines

We began by completing the first three tasks as planned. However, the framework we developed was much broader that originally envisioned. The initial plan was to have the guidebook be specific to a given industry or other appropriate group. The Advisory Committee felt, and the Department of Education was convinced, that a broader guidebook would be best. We then collected data from different kinds of training sources and conducted focus groups with small businesses in preparation for developing the guidebook. The guidebook went through several revisions and was finally tested in the field with some small business personnel. The final guidebook has been submitted to the Department of Education.

The report is organized into seven chapters. The next chapter discusses background and the findings from the literature review. We have included some works identified after submitting the literature review. Chapter 3 presents our considerations in choosing a framework for the project. Data collection is described in Chapter 4, both in

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terms of our study of different training alternatives and the focus group results. Chapter 5 discusses the results of our usability testing. We discuss our conclusions and recommendations in Chapter 6 and dissemination options in Chapter 7. References are included at the end of the report. The Program Evaluation Checklist is in the Appendix.

Chapter 2. Background and Literature Review

One of the initial steps in this project was to review the literature related to adult education and training in small business and training evaluation. In this chapter we will include some of the sources we uncovered during the initial search, as well as other sources updating the search from that time.

We classified the materials into one of four categories which guided our search.

A.   Training in Small Businesses

In developing a guidebook to be used primarily by small businesses we wanted to gather the most recent information on how such firms currently train their employees. We were able to locate a number of books and articles that speak to this point.

Small businesses have generated many of the jobs created in recent years. They also are more likely to be employers of entry-level workers (Business Council for Effective Literacy, 1990; U.S. Small Business Administration, 1988; Office of Technology Assessment, 1990). As entry level employees, these workers are frequently in need of training. Over the next ten years there will be a shortage of such workers and it will be necessary for these firms to employ more minorities, women, and immigrants, who may have even more of a need for training than current employees (Business Council for Effective Literacy, 1990; U.S. Small Business Administration, 1988; Lichtenstein, 1989; Szabo, 1991).

Small firms are not currently in a good position to take on this challenge. They offer less training in every category than large firms (Business Council for Effective Literacy, 1990; U.S. Small Business Administration, 1988; Banks et.al., 1987; Lee, 1991).

One of the reasons could be higher turnover at smaller firms (Bishop, 1991a; WAVE, 1991). Also, training that is not specific to the firm may be lost to the firm if an

employee leaves to work elsewhere (Bishop, 1991b). When considering training, small businesses are very concerned about costs and also time away from the job (Business Council for Effective Literacy, 1990; Banks et. al., 1987; Kelly and Thompson, 1988). Persons in small firms are needed more urgently and it is harder for them to be released from work to attend training.

Another reason for the lack of training in small firms is that frequently there is nobody employed by the small firm to handle training and employee development (Banks et. al., 1987; Kelly and Thompson, 1988). Instead, the president, or perhaps an administrative assistant, takes on this role. Therefore, the person selecting training for a small business usually has no expertise in education and training.

Small businesses are more likely to use trade associations, college courses and technical training sources than large businesses (Banks et. al., 1987; Lichtenstein, 1989). Lee (1991) found that small businesses appear to want the same kinds of courses as large businesses and basic skills training is on the bottom of their list. Nevertheless, this may be the type of training most urgently needed (Lichtenstein, 1989; Office of Technology Assessment, 1990). Small firms who have promoted basic skills training appear to have received benefits to their organizations (Szabo, 1990). Firms who continue to support workplace education programs feel they are worthwhile in reducing error and contributing to employee morale (Bassi, 1992).

These findings influenced our guidebook in two ways. Our guidebook had to be educational, since there are usually no training and development personnel in small businesses. We had to write the guidebook so that a person without any training background could understand it. Second, the difficulties for a small business in finding affordable training offered at a convenient time and place should not be minimized. We wanted to provide some practical guidance as to where to look.

B.   Training Evaluation Models

Brandenburg and Smith (1986) provide a good overview of the history of training evaluation studies over the past thirty years. We concentrated our search on methods of *summative* evaluation, which is concerned with program effectiveness, rather than *formative* evaluation, which is concerned with testing training results as a course is being

developed. A discussion of formative and summative evaluation can be found in Gagne et. al. (1988).

Kirkpatrick (1967) initially formulated a model for training evaluation which has been extremely popular and is still used in many evaluations, both in the United States and overseas. The four-level model looks at reaction, learning, behavior and results. More recent approaches frequently are just a variation of this basic model. For example, the American Society for Training and Development Guide (1986) has five evaluation criteria that could be seen as Kirkpatrick's second level divided into two categories.

More recently there are a number of new trends in evaluation. Brinkerhoff (1987) has developed a six stage model of evaluation which differs from Kirkpatrick's approach. His point of view is more oriented to the business perspective and de-emphasizes the reactions of trainees. Other models also oriented toward the business perspective that have appeared in the literature are cost-benefit models such as Basarab (1990), which provides detailed information on how to calculate a return on training investment. IBM uses an input-process-output model of evaluation (Bushnell, 1990). Fairfield-Sonn (1987) presents a strategic process model that he specifically orients toward small business and provides an example of its use.

One of the most recent books on evaluation implicitly criticizes the Kirkpatrick approach in that it reports findings that trainee reactions appear to have no relationship to how much trainees learned or retained (Dixon, 1990). She argues that training evaluation must not be based on employee reaction, but rather on measures of performance and on-the-job behavior. Some previous users of Kirkpatrick's levels of evaluation have argued that they are dependent upon one another. For example, if trainees have a poor reaction to the instructor they are less likely to learn. If the levels are not related to each other empirically, then knowing student reactions will not tell us anything about learning, behavior or results.

Although most of the training evaluation literature stresses a quantitative approach, there is a school of thought that sometimes qualitative evaluations are more appropriate. Representative of this point of view is the Patton (1980) book.

Some of the evaluation criteria which would provide the best information for decision-making are the most difficult to collect. Calculating the return on investment

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may be possible for IBM, but is it practical for a small business? If only one employee is being trained, making the calculation could be time-consuming with little potential payoff. On th 2 other hand, if a firm bases its decision to choose a certain vendor based on past participant reaction, will this necessarily mean that this program will be effective for the new firm?

C.   Training Evaluation Studies

It is difficult to locate training evaluation studies, particularly those that evaluate package programs. This appears to be primarily due to the fact that many such studies are in-house products that are produced as an internal report, but never published in the more formal literature. There have been several large surveys of businesses concerning their training evaluation practices, which are discussed below. In addition, there have been a few surveys of training evaluations, some of which have relied upon published studies and some of which have relied upon unpublished studies. We have also included recently completed evaluation studies that we have been able to obtain in report form.

A series of articles have surveyed businesses to find out how they evaluate training programs (Campbell et. al., 1970; Catalanello and Kirkpatrick, 1968; Clegg, 1987; Delaney et. al., 1989; Kirkpatrick, 1978). Despite the wide range in publication dates, a major conclusion remains the same: Most firms evaluate courses based upon trainee reactions. In addition, it appears that most firms do not feel this is the most effective method. Grider et. al. (1990) found that the methods rated by human resource development professionals as most effective were: behavior evaluation, competency-based evaluation, and correlation evaluation.

Another group of articles analyzes actual evaluation studies rather than business practices reported on surveys (Brandenburg, 1989; Dubin et. al., 1974; Hawthorne, 1987). Once again a major conclusion is that the most common criterion for evaluation is student reaction. The second most common criterion is measures of improvements of skill or knowledge.

We have been able to find few recent training evaluation studies (Abt Associates, 1990; Creticos and Sheets, 1989; Kutner et.al., 1991; Manpower Demonstration Research

Corporation, 1988; Meridian Corporation, 1991a, 1991b, 1991c; Nightingale et. al., 1991; Yin, 1989). Those that we did find confirmed the pattern discussed above. Kutner et. al. (1991), for example, reports that assessment of the program usually relied upon anecdotal evidence by instructors and participants.

Although everyone agrees that it is very important to evaluate training, it appears that this is rarely done. Even when there is a training evaluation most of the studies are not published so it is difficult to locate them. In choosing a training program we recommend asking the vendor about previous evaluations of the course, but most programs will probably not be able to satisfy this request.

D.   Guides to Choosing a Training Program

The need for a guidebook for selecting training programs is underscored by the observation in Carnevale et. al. (1990) that most training in the U.S. (up to 90 percent) is based on off-the-shelf products. With a wide selection of potential vendors for any given course, developing a good method for evaluating them is very important. Previous articles and brochures present criteria for vendor selection that we considered in developing ours.

Many of the guides mention that the organization must compare their training needs with the objectives of the program (American Society for Training and Development, 1988; Martin, 1983; Rogers and Volpe, 1984; Scriven, 1974; Sticht, 1991). We included a section in the guidebook about training needs analysis.

Certain criteria were found in many of the references listed, including:

Cost or cost effectiveness (American Society for Training and Development, 1988; Carnevale et. al., 1990; Rogers and Volpe, 1984; Scriven, 1974; Sticht, 1991; Tartell, 1987)

Evaluation Results (American Society for Training and Development, 1988; Martin, Phillips, 1983; Scriven, 1974; Sticht, 1991; Tartell, 1987)

Delivery Method (American Society for Training and Development, 1988; Carnevale et. al., 1990; Martin, 1983; Phillips, 1983; Tartell, 1987)

Expertise and/or Experience of Vendor (American Society for Training and Development, 1988; Carnevale et. al., 1990; Phillips, 1983; Sticht, 1991)

Content (American Society for Training and Development, 1988; Carnevale et. al., 1990; Martin, 1983; Phillips, 1983)

References (American Society for Training and Development, 1988; Phillips, 1983; Tartell, 1987)

Materials (American Society for Training and Development, 1988; Tartell, 1987)

Support (Carnevale et. al. 1990; Scriven, 1974)

Environment (Martin, 1983; Phillips, 1983)

It is interesting that evaluation results are considered important by most authors who have developed selection criteria. The question is where are those evaluation results coming from. If they are from the vendor, there is the obvious problem of objectivity.

There were other criteria that were only mentioned in one article or book:

Availability (American Society for Training and Development, 1988;

Philosophy (Carnevale et. al., 1990)

Pilot testing (Rogers and Volpe, 1984)

Many of these criteria mentioned by others were appropriate to include in the guidebook. After completing the research described in Chapter 4, we developed our seven guidelines that were used in the guidebook.

Chapter 3. Choice of Target Audience for the Guidebook

The original research proposal planned to develop a guidebook for some particular subset of small businesses that would enable them to choose effective training programs for their employees. We planned to choose a "critical" category of programs and then develop a guidebook for that category. In this chapter we will describe our considerations in choosing a category. The Advisory Committee recommended against this approach and the framework we eventually adopted will be presented at the end of the chapter.

A. Criteria for Choosing a Critical Category

We considered four different criteria in trying to choose a critical category.

- **Potential Use**

  One criterion is the number of businesses, both small and large, that could make use of a guidebook concerning a chosen category. For example, if the guidebook concerned training programs for a rare and unusual occupation that existed in only 75 businesses in the United States, it would have limited circulation. We wanted to have a guidebook that could be of use to a wide audience of businesses and would reach a large number of individuals who need training.

- **Current Relevance to National Needs**

  Many Americans are concerned about the state of U.S. business and the economy. Consensus seems to be building that the education and training of the labor force is critical to the nation's prosperity. One criterion for the guidebook is to have it

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address a segment of training where there is currently much need. An example would be training that addresses the shortage of entry-level workers in the 1990s.

- **Future Relevance to National Needs**

Instead of focusing on the current situation, another approach is to look to the future. What kind of training might be needed for preparing the workforce for future jobs? A guidebook that enabled business to better prepare workers for high technology jobs in the future might be very useful.

- **Small Business Needs**

Based on the small number of studies of small businesses that we could find, small businesses appear to feel that certain types of training are more important than others. We could choose a category that small businesses would be more likely to use because it would meet their perceived needs.

B. Possible Critical Categories

We considered choosing a critical category in three different ways: by type of program, type of provider, and type of trainee. Within each of these categories we considered several alternatives.

Type of Program

Developing a guidebook that focuses on a particular type of training program is intuitively appealing. Once a category was chosen and further defined, it would be easy to identify relevant training programs for study. Three types of programs we considered were: basic skills, computer skills, and management training.

Currently there is considerable interest in basic skills and workplace literacy. The concern is that many American workers do not possess the basic competencies to function in the workplace. Despite the discussion in the literature of how important basic skills are in small business, this may not be the common perception in the firms themselves. Basic skills was on the bottom of the list of the types of training currently

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provided in a survey of training practices in small and large businesses (Lee, 1991), and may not be the best choice for this reason.

Another possible category we considered was computer skills. Such skills are becoming a larger and larger component of people's jobs. In 1988, 70 percent of fixed-capital investment was computers and telecommunications equipment (Coates et. al., 1991: 16). Computer literacy is even more important in the future for small businesses. The growth in manufacturing firms employing fewer than 100 workers was strong in the latter half of the 1980s due in part to "use of computerized machine control technology that made it feasible to turn out goods in shorter production runs" (Business Council for Effective Literacy, 1990: 5).

A third possible type of training we considered was management training. On the top of the list of training that small employers offer, or want to offer, is management training (Banks et. al., 1987; Lee, 1991). Both small and large firms give management skills the highest rank. If the guidebook centered on this area it would presumably be useful for all of the companies that send employees to such programs now. However, this would not focus on the problem of the entry-level workers. Those who get management training tend to be more highly educated anyway. There is growing concern that it is the less-educated half of the workforce that needs more attention.

Type of Provider

Another way of choosing a critical category is to focus on a particular type of training provider. The guidebook would then be relevant for companies who are considering sending their employees to that type of program and would help them to decide if a given type of provider were a good choice. There are many possibilities for categorizing training providers. We considered community colleges, training consortia, and specialized training companies. Junior and community colleges have become important providers of education and training to a variety of workers. One-third of the providers of outside training in the study of 18 small business workplace learning programs by Berkeley Planning Associates (Vencill et. al., 1991) were community or junior college staff. Training consortia are considered as a possible solution to the problem of small businesses meeting their training needs in the Office of Technology Assessment (1990) report on worker training. Within a given geographic location or within a particular business market, such as banking, small businesses form a consortium

to offer programs to members of their group. In this way small businesses can potentially gain some of the economies of scale available to larger firms (Lichtenstein, 1989). Unlike larger firms, which have training departments that develop in-house programs, small businesses are heavily reliant upon outside firms. It is difficult for a small company to differentiate between marketing and substance.

Type of Trainee

Yet another way of choosing a critical category is to focus on the type of trainee. In this case the guidebook would be specifically focused on meeting the needs of certain types of employees. We considered five possible categories: entry-level workers, immigrants, older workers, high school dropouts, and displaced workers.

Choosing entry-level workers as a category would be similar in some ways to choosing basic skills. A small business might find it easier to identify entry-level workers and then use the guidebook, compared with having to first decide if its workers are deficient in basic skills.

It is expected that some of the shortfall in the number of young workers entering the labor force in the 1990s will be made up from the immigrant pool (Lichtenstein, 1989; U.S. Department of Labor and U.S. Department of Education, 1988). Immigrants have special needs, not just in terms of language, but also in terms of understanding and adapting to American culture.

Another possible category is that of older workers reentering the workforce. As already stated there is a need to make up the shortfall of younger workers from another source. Women who have taken time to raise a family may enter the workforce at an older age. Older workers have a different perspective and needs compared with younger workers. They may have stronger motivation and problem-solving skills, for example. However, in other areas they may need more help. An example would be the older person who is afraid of computers compared with the younger person who has used them in school.

At a conference held by the National Alliance of Business, Thurow (National Alliance of Business, 1991) emphasized the importance of educating the bottom half of the workforce. Much of the educational system focuses on those students who are going

to college. Students who do not even graduate from high school cannot find jobs easily due to lack of skills.

In her book on management challenges for the 1990s, Kanter (1989) discusses the increased mobility of the workforce. The pattern of staying with one organization for an entire career is disappearing. People change jobs many times during their working lives. Although professionals with strong educational backgrounds can make these transitions on their own, many lower level workers may need more help. Having mastered certain skills in a particular industry, they may need to be extensively retrained in another occupation.

C. The Chosen Framework

At the first meeting of the Advisory Committee, the possible categories that could be used for the guidebook were presented. The consensus of the committee was that the guidebook should be aimed at the broad spectrum of small businesses rather than restricted to a particular sector. None of the categories described in the first part of this chapter were adopted. However, we did define an audience for the guidebook and a framework for collecting data on training programs.

The audience for the guidebook is small businesses, defined as those having 500 employees or less. Within this definition are a wide range of businesses. We decided to focus particularly on companies at the lower end of the range. These are the companies who are not likely to have a training professional on staff.

The guidebook is intended to help small businesses select a training program from an outside vendor. We did not concern ourselves with on-the-job training or career development. If a small business has defined a training need, the guidebook helps them to evaluate the alternatives.

The guidebook is not specific to a particular type of training program, such as basic skills. Rather it is aimed at helping to identify and examine existing programs that could be focused on any workplace training need. When we collected data on training programs we did limit our search to certain types of programs. However, the guidebook is not restricted to certain programs.

We also did not limit the guidebook to certain types of providers of training. In fact, the guidebook discusses the pros and cons of various kinds of training providers, including: community colleges, national training developers, local training consultants and community business associations.

Chapter 4. Development of the Guidebook

In order to develop a guidebook that was realistic for the small business user we collected information from two sources. First, we studied training and education programs offered by large national companies, small local vendors, community colleges and training consortia. We wanted to see the kinds of information that would be available for a company seeking training. Second, we conducted focus groups with small business personnel to gain a better understanding of how they view training so that the guidebook could be structured to better serve their needs.

A. Analysis of Training Programs

Training and education programs are available from a wide variety of sources. The issue is what kinds of information can be collected on a given program that might aid in selecting one that will best suit a given training need. We contacted vendors from four different sources of training and asked them about given courses. The most time was spent with large training companies, but we also surveyed small local training companies, training consortia and community colleges.

We developed a selected list of types of training programs--for example, word processing--to guide our data collection. This list was intended to be the most common types of training that small businesses might select. We used the training survey that appears annually in <u>Training</u> magazine to find the programs to include. This survey did not include companies with less than 100 employees, but did have some data shown separately for companies having between 100 and 499 employees. We included a program if:

- 60 percent or more of businesses between 100 and 499 employees provide this type of program

- 40 percent of all companies provide this type of training

- 30 percent of all companies use outside vendors, either partially or exclusively, to provide this training

To aid in collecting information we developed a Program Evaluation Checklist which lists various instructional characteristics that past research tells us lead to effective instruction. A copy of this checklist is included in the Appendix.

Large Nationwide Training Companies

We attended the 1992 meeting of the American Society for Training and Development in order to talk with training vendors. Our procedure was to first approach a vendor to obtain brochures on the program of interest. After reading the brochure we returned to the vendor to discuss the course in more detail. If possible, we examined course materials. In a few cases only we were about to observe a course. The number of programs studied is shown below in Table 1.

Table 1
Number of Each Type of Training Program Offered by Large Training Companies Included in the Sample

	Number of Companies
Management Skills/Development	
Delegation Skills	1
Decision-making	2
Managing Change	2
Supervisory Skills	
Motivation	1
Problem Solving	2
Negotiating Skills	3
Communication Skills	
Interpersonal Skills	1
Team Building	5
Listening Skills	2
Writing Skills	7

	Number of Companies
Basic Computer Skills	1
Word Processing	2
Personal Computer Applications	2
Computer Programming	2
Data Processing`	2
Management Information Systems	1
Quality Improvement	
Customer Relations/Services	2
Executive Development	1
Leadership	3
Clerical/Secretarial Skills	
Personal Growth	
Time Management	3
Goal Setting	
Stress Management	1
Total Number of Programs	46

In about half of the cases we were able to obtain a brochure and also interview some of the sales personnel about the course (Table 2). For another third of the programs we were also able to examine materials. Obtaining this information took persistence, however. Training vendors do not appear to be accustomed to having a lot of questions asked about their programs. The persons who work the booths at the large training conventions are usually sales personnel, rather than instructors or course developers.

Table 2
Sources of Information Collected About Programs Offered by Large Training Companies Included in the Sample

	Number of Programs
Brochu. Only	3
Interview Only	1
Brochure and Interview	24
Brochure, Interview and Observation	1
Brochure, Interview and Materials	16
Brochure, Interview, Materials and Observation	1
Total	46

By using all of the possible sources of information, we could sometimes obtain the information needed for completing the program evaluation checklist and sometimes not. Table 3 shows the percentage of time that the information was available. Information on course content was relatively easy to obtain. For all items, we were able to obtain the information from at least 85 percent of the programs. Information about the instructor was more difficult. We did not include items about the instructor in the final guidebook we developed. Past experience of the firm was mixed. Most companies could not provide information on their past experience with small business firms, because they do not keep their records in this manner. Information on cost and availability could usually be obtained. The last item concerning course effectiveness was information about any past evaluations of their programs. About half the firms could provide this.

Table 3
Percentage of Companies Supplying Information Needed for
Course Selection and Evaluation

Program Evaluation Checklist Items	Percentage of Companies Supplying Information
I. Needs Analysis	
Will do TNA	100%
II. Course Content	
Objectives available	98
Outline available	96
Pretest of competencies given	91
Postest of competencies given	87
Adjustments made based on course participants	96
Methods used	98
Appropriateness of methods	96
Active learning opportunities	96
Practice of new skills	91
Feedback on performance given	85
Presented in context	98
III. Instructor	
Direct experience with course material	63
Amount of experience with this course	33
Previous ratings	11

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Program Evaluation Checklist Items	Percentage of Companies Supplying Information
IV. Past Experience	
Number of times course given	82
Number of clients	61
Number of small businesses	38
Adjustments made for small businesses	72
Client list available	63
V. Cost	
Length of program	93
Cost of program	89
Discounts available	74
VI. Availability	
How soon program can be offered	91
When can program be offered	89
VII. Evidence of Effectiveness	56

We recorded where we were able obtain the information for the program evaluation checklist. Table 4 shows what source or sources provided the information. The table shows the percentage obtained from each source if we were able to obtain it at all. For example, if we were able to get information about training needs analysis, 70 percent of the time we got it from the interview only.

Generally, multiple sources are needed to obtain the information needed for course evaluation and selection. If one relies only upon a brochure or only upon an

interview, insufficient information will be available. Using both sources greatly improves the percentages.

Different types of information are available from different sources. For example, information about course objectives is commonly found in the brochure, but information about a training firm's past experience is normally obtained in the interview.

Table 4
Percentage Distribution of the Source of Information Needed for
Course Selection and Evaluation

Program Evaluation Checklist Items	Sources of Information (B=brochure I=interview M=materials)						
	B only	I only	M only	B&I only	B&M only	I&M only	Other
I. Needs Analysis							
Will do TNA	20%	70%	---	11%	---	---	---
II. Course Content							
Objectives available	68	6	4	15	---	---	7
Outline available	61	14	11	9	2	2	---
Pretest of competencies given	50	36	2	10	---	2	---
Postest of competencies given	43	40	3	10	---	---	4
Adjustments made based on course participants	39	50	---	11	---	---	---

Program Evaluation Checklist Items	Sources of Information (B=brochure I=interview M=materials)						
	B only	I only	M only	B&I only	B&M only	I&M only	Other
Methods used	33	20	4	22	2	2	16
Appropriateness of methods	41	23	11	14	2	4	5
Active learning opportunities	34	25	11	16	---	9	5
Practice of new skills	31	31	12	14	---	7	5
Feedback on performance given	33	38	8	10	---	5	5
Presented in context	38	36	7	13	---	2	4
III. Instructor							
Direct experience with course material	28	55	---	14	---	---	3
Amount of experience with this course	27	60	---	7	---	---	7
Previous ratings	--	100	---	---	---	---	---
IV. Past Experience							
Number of times course given	27	64	---	9	---	---	---
Number of clients	36	57	---	7	---	---	---
Number of small businesses	8	92	---	---	---	---	---
Adjustments made for small businesses	12	85	---	3	---	---	---
Client list available	14	86	---	---	---	---	---

Program Evaluation Checklist Items	Sources of Information (B=brochure I=interview M=materials)						
	B only	I only	M only	B&I only	B&M only	I&M only	Other
V. Cost							
Length of program	44	51	—	5	—	—	—
Cost of program	51	49	—	—	—	—	—
Discounts available	44	56	—	—	—	—	—
VI. Availability							
How soon program can be offered	36	64	—	—	—	—	—
When can program be offered	41	56	—	2	—	—	—
VII. Evidence of Effectiveness	19	73	—	8	—	—	—

These results concerning large training companies have been primarily concerned with obtaining the required information. We also obtained some results concerning the actual services that training companies provide which will be discussed below.

Before selecting an education or training program a company should decide whether anyone actually needs further training by conducting some form of training needs analysis (TNA). Small businesses frequently do not have this expertise in house and may need to rely on outside help. Many of the large training companies said that they could provide a training needs analysis (Table 5). The average time needed for the analysis for those willing to conduct one appeared to be one week, indicating a rudimentary approach. A quarter of the training firms said that they would be willing to assist a small business conduct their own TNA.

Table 5
Statistics Concerning Training Needs Analysis Derived
from the Survey of Large Training Companies

Percentage willing to conduct a TNA	39% (46)
Mean time needed to complete the TNA	5.5 days (10)
Percentage willing to help a small business to conduct a TNA	24% (29)

Note: Numbers in parentheses indicate the number of programs from which the information was obtained.

We also collected some information concerning course content (Table 6). Only about one-half of the companies listed their training objectives in the brochure or course materials. Others had general objectives, but had not clearly identified for communication to possible participants. Of those who could identify their objectives, most had at least some objectives that could be measured. In terms of measuring the competencies of the participants before and after the program, a minority of courses could do this. A higher percentage assessed competencies after the program than assessed it before. Course outlines were available for 83 percent of the courses. A majority of courses could be adjusted somewhat depending upon the participants in the program.

Table 6
Statistics Concerning Course Content Derived
from the Survey of Large Training Companies

Percentage giving training
   objectives   53% (45)

Measurement of objectives

   All are measurable   29%
   Some are measurable   54
   None are measurable   17

                            100%
                            (24)

Percentage giving course outline   83% (43)

Percentage assessing competencies
   before the program   39% (41)
   after the program   35% (40)

Percentage who will adjust course
   based upon the participants   61% (44)

The courses offered continued to rely upon the traditional instructional methods, with the highest percentage of companies using lectures (Table 7). Discussion was the second most common method, followed by videos and simulations. Simulations can be a very effective tool if they are related closely to required work on the job.

Table 7

Percentage of Large Training Companies Using Various Training Methods

Method	Percentage Using this Method in the Program
Lecture	67%
Self-study	11
Video or film	35
Audio	--
Interactive video	9
Computer-based training	22
Discussion	50
Role-plays	17
Case studies	26
Simulations	37
Work conferences	15
Field projects	2

In the previous chapter we discussed the fact that evaluation of training appears to be rare, despite its importance. We asked about the types of evaluations that had been done for the courses we sampled. The most common type of evaluation performed is trainee reaction, which is Kirkpatrick's first level of evaluation (Table 11). Pre- and post-testing, changes in behavior, and measurement of effects on the organization are relatively rare. Although it is not a form of evaluation, many companies were willing to provide selected testimonials from satisfied customers.

Table 8
Types of Evaluations Performed by Large Training Companies

	Percentage Performing
Selected testimonials	54%
Trainee reactions	39%
Pre and post testing	11%
Changes in behavior	9%
Effect on organization	9%

We were only able to collect this extensive information for large nationwide training companies. A variety of methods were used to learn about other sources of training.

Small Local Training Vendors

We contacted local vendors within the metropolitan Washington area. We excluded branches of large national companies. One hundred and seven vendors were contacted by telephone. More than half did not return our phone calls. Many of these companies are small and do not appear to have full-time secretarial support; answering machines were very common. Of those we did reach, many offered training programs outside the scope of our study. We managed to complete a program evaluation checklist for eleven courses. While this is too few to perform a statistical comparison with the large nationwide training vendors, we noted certain patterns:

- Brochures from small companies frequently cover all programs, not just one course. This makes it more difficult to assess course objectives and content. An interview is even more important with the small training companies.

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- When interviewing a small vendor you are usually talking with the President who may teach some of the courses. This makes it easier to find out about the course. The large nationwide training programs have professional sales people who may not be as knowledgeable about training.

- Small companies tend to offer programs at a lower cost than the larger firms.

- Small companies generally tend to use the same methods as the large companies, but appear to use more role plays. This may just be an artifact of a small sample, however.

- Most local vendors appear to be very willing to tailor a program to a small firm's needs.

Community Colleges and Local Universities

We contacted community colleges and colleges having adult education programs in the Washington, D.C. area. In this metropolitan area alone, we found over a dozen programs. Community colleges appear to be targeting small businesses and are eager to work with them. In our interviews with college personnel, we asked them which courses were offered on our list. Almost all courses were offered by every institution. However, this does not mean that the course is necessarily being offered as a college course. Instead, the community colleges appear to have consultants who offer courses in various areas. When someone requests a course they are able to provide it.

Costs are quite low. Prices quoted are $5 to $15 per student per hour. These prices are even less expensive than either national or local training vendors.

Community colleges are quite willing to tailor a course for a specific firm.

Consortia

One of the ways of sharing the costs of training for small businesses is to have groups of similar businesses band together to develop the materials. This appears to be occurring through the development of consortia. We began with learning of the

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American Institute of Banking's training program. This allows banks to offer specialized courses for their staff without having to develop the course themselves. We contacted associations to learn of other programs. Those that we uncovered appear to be a small sample of those that are available. For example the National Association of Home Builders has a Home Builders Institute that offers courses, such as building codes and standards, building technology, computer applications, estimating, to name a few. These courses are offered in many states and could be convenient for a small business specializing in home building. Other consortia include: National-American Wholesale Grocers' Association, National Foundation for Women Business Owners, Association of Government Accountants, and the American Institute of Certified Public Accountants.

Most small business have a national association of businesses similar to their own. Many of these associations also have training arms that can provide industry-specific training. This source of training is more important than we realized at the beginning of this project.

B. Study of Small Business Training Practices

Four different types of focus groups were held with small business owners or human resource directors. Three of them were conducted by AIR staff and one was held by another organization and a questionnaire was given to participants. For all of the groups we collected information about their current training practices, particularly in regard to choosing a vendor.

The National Association of Manufacturers held their own series of focus groups with CEOs of small businesses around the country for the Department of Labor. They distributed a one-page list of questions about small business training that participants could return to AIR if they wished. Eight participants returned the survey. All of these respondents purchased some training for their staff from outside vendors. The factors most often considered in choosing a vendor were:

- cost
- course content
- previous experience of the training company
- delivery mode

Some respondents also considered training goals and objectives. The most common method for locating training vendors was through personal contacts at other companies or through local groups, such as the Chamber of Commerce.

The three focus groups conducted by AIR were located in Raleigh, North Carolina; Cincinnati, Ohio; and Herndon, Virginia. At each of these focus groups participants were asked about their current training practices. The participants for the focus group in Herndon, Virginia were from larger companies than those in Raleigh and Cincinnati. This affected the responses of the groups.

In both the Raleigh and Cincinnati focus groups, respondents reported that they do little training. They generally agree that they should do more, but it is difficult to spare the time and the money. On-the-job training becomes the most common type of training provided and even this is sometimes inadequate. Problems they recognized as being created through this lack of training include turnover, equipment breakdowns, losses in sales, and increased call backs.

One reason why training may not be getting the attention it deserves is that only one of the companies in Raleigh and Cincinnati had a training person. At all of the other companies, training was handled by the CEO or department heads.

When training is provided, our focus group participants are not likely to compare vendors. If a relevant training brochure arrives at the time a particular type of program is sought they will consider sending a person to that program, but may not compare it to any other program. The decision about whether to use a program is influenced by cost and whether the program can be offered at a convenient time. Courses offered through community colleges and local groups, such as the Chamber of Commerce, are considered to be cost effective.

The Herndon Virginia focus group had somewhat different results. These companies were larger (150 to 420 employees) and the participants at the meeting were human resource directors from these firms. Accordingly, these companies are providing an array of programs, including basic skills and TQM.

These human resource directors rely on each other to find good training programs. They also use industry-specific associations, national training organizations,

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and local universities as possible sources. Prior to purchase, programs are reviewed if possible. Sometimes a program can be observed at another company.

We realize that these focus groups cannot provide a full picture of training programs used by small businesses. Nevertheless, we gained insights from the groups that we incorporated in our initial draft of the guidebook. Some of these ideas were:

- Size of the company seems to make a difference in terms of how training decisions are made. Small companies do not usually have anyone who specializes in training.

- Even though they may not be doing it, small companies have some appreciation of the need for training.

- A small company cannot afford to send many employees to training at the same time.

- The relative merits of different training programs are rarely compared. The decision is usually whether to do a specific program, rather than comparing different sources for the same program.

- Cost is a key factor in choosing a training program.

- If a training program does not announce itself through a brochure, it will be relatively unlikely to be chosen.

- Local organizations, such as the Chamber of Commerce or the Council for Entrepreneurial Development in Raleigh, provide important opportunities for training. In addition, local community colleges are attractive due to low cost.

- Word of mouth is very important in finding relevant training programs for small businesses.

- Managers and supervisors tend to get more training than workers.

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- Sometimes training is not given to increase productivity, but rather to improve morale or as a "perk."

- Training is not usually planned, but rather is given ad hoc, in response to events or an attractive opportunity.

C. Drafting the Guidebook

The information on training programs and small business practices was presented to the Advisory Committee. They had some suggestions for the format of the guidebook and sections to include. The consensus was that the guidebook would consist of three sections, including: training needs analysis, guidelines for selection, and evaluation. AIR research staff drafted sections of the guidebook and AIR's Document Design Center staff reformatted it to make it as easy to understand as possible.

Chapter 5. Testing of the Guidebook

The guidebook is intended to be useful to small business owners and managers who must choose training for their staff. In order to test the guidebook with this intended audience, we distributed copies to small businesses throughout the United States. In this chapter we will describe the results of this usability testing.

A.   Distribution of the Guidebooks

In order to get some input from small businesses on the guidebook, we mailed a guidebook along with a short questionnaire to a variety of respondents. Four methods of obtaining respondents were used:

1.   We sent the guidebook to participants in our focus groups. Fourteen participants were in focus groups in Virginia, Ohio and North Carolina.

2.   We asked several members of our advisory committee to distribute copies of the guidebook to small business persons they know. This accounts for another 16 questionnaires distributed in Minneapolis and the District of Columbia.

3.   We contacted Small Business Development Centers (SBDCs) in various states and asked them to assist us by distributing questionnaires to small business persons that they know. Usually the state director of the SBDC said that he or she would distribute the questionnaires to the regional directors within the state or directly to small businesses themselves. This method accounts for the majority of the questionnaires distributed--156. The states who agreed to participate and the number of questionnaires distributed to each were:

<u>Number of Questionnaires</u>

Alabama	12
Arizona	20
California	24
Connecticut	10
Delaware	2
Illinois	16
Iowa	10
Montana	10
Nebraska	6
Oregon	1
Pennsylvania	10
Rhode Island	20
Tennessee	15

4.   After using the first three methods mentioned above, we ran an ad in <u>The Washington Post</u> looking for small business persons who would like a guidebook such as ours in return for completing an evaluation of it. From this source we distributed 10 guidebooks.

In total, 196 guidebooks were distributed. From all of these methods, we received 19 responses, or approximately 10 percent. This is a low rate of return, but probably is to be expected given the method of sampling. Our methods of distribution were very indirect and we had no leverage over the potential respondents. Particularly with the SBDCs we had no control over who the guidebooks were given to. Nevertheless, the respondents are geographically distributed throughout the country and some patterns emerge that are fairly consistent.

B. Characteristics of the Respondents

We had responses from all sections of the country as follows:

West	California	2
	Montana	1
	Oregon	1
Midwest	Minnesota	4
	Nebraska	1
	Ohio	2
	Wisconsin	2
Northeast	District of Columbia	1
	Maryland	1
	Rhode Island	2
South	North Carolina	1
	Alabama	1

Of the 19 responses, 4 were from heads of Small Business Development Centers. Their responses are of interest due to their frequent contact with small business people. However, we want to separate these responses from those from actual businesses. From this point on we will discuss the results from the small businesses and then make some comments about the reactions of the persons from SBDCs at the end of this chapter.

We asked respondents from some characteristics about their business. The businesses represented show a wide range as indicated by years in business, gross revenue and number of employees. However, most of the businesses were relatively small; half of them had 20 employees or less (Table 10).

The person responding to our survey was almost always the person who makes training decisions within the company. Only two respondents said that another person made the training decisions. The position of the survey respondent varied, however.

Most commonly the respondent was the president or CEO of the company or the director of human resources.

The number of persons each company had sent to training in the last year varied between zero and 25, with an mean number of 6.9.

Table 10.
Characteristics of Survey Respondents

Characteristic	N	Low	Average	High
Gross revenue 1992	10	$0	$5.4 million (mean)	$18 million
Number of employees	14	1	20 (median)	250
Years in business	14	2	20 (median)	64

C. Perceptions of the Guidebook by Small Businesses

We asked respondents questions about their initial reaction to the guidebook, their evaluation of the content and format, and how they used the guidebook to make decisions.

The initial impression of readers when picking up the guidebook was usually favorable. On a 7-point scale, the mean response was 5.1. However, a minority of respondents had negative reactions. The most common comment was that the cover was dull and boring. It appears that a different cover would attract more readers.

We wanted to know how readers would actually use the guidebook. All but one of the respondents read the guidebook at one sitting rather than over a period of time. Eighty percent spent between 11 and 60 minutes reading the guidebook. We intended the book to be easy to read and this goal appears to have been fulfilled.

Respondents rated the guidebook on a number of 7-point scales as shown below. For all of the scales, except the first, a higher score is a more favorable result. We have marked the mean score below the scale. Brackets indicate the range of responses.

The level of detail for these respondents appeared to be "about right." Eight of the respondents rated the level of detail as "4." Of those who disagreed, three thought the level of detail was slightly too little and three thought it was slightly too much.

Table 11.
Reactions of Respondents to the Guidebook

Level of Detail:

Too little Detail			About Right			Too Detailed
1	2	3	4	5	6	7

[--------4.0 (14)]

Organization:

Disorganized						Well Organized
1	2	3	4	5	6	7

[--------------5.6 (14)-----]

Writing Clarity:

Confusing						Clear
1	2	3	4	5	6	7

[------------------5.6 (14)-----]

Format:

Difficult to Read						Easy to Read
1	2	3	4	5	6	7

[-----------------5.4 (14)-------]

Examples:

Poor						Excellent
1	2	3	4	5	6	7

[----------------5.1 (14)---------]

All respondents felt that the guidebook was organized. Everyone responded at the midpoint or higher, yielding a mean of 5.6. A similarly high mean was obtained for writing clarity, although one person did rate the guidebook a three on this variable. In terms of format, the mean was slightly lower, again with one rating below the midpoint on the scale. Examples received the relatively lowest rating, although the mean was still above 5.0.

After completing these specific ratings, respondents were asked to give an overall rating in terms of how useful they felt the guidebook would be to them. Three-quarters of the respondents gave a 5, 6 or 7 on a 7-point scale, yielding a overall mean of 4.9. However, one-quarter of the respondents rated the guidebook as a 1, 2 or 3. Unfortunately, the comments of those who gave low ratings were not clear as to why the low ratings were given. One individual complained that the book was too simple.

Respondents were asked to describe the most useful information in the guidebook and the least useful. Of those who responded, all but two said that the guidelines or checklist were the most useful. This is an important result, since the guidelines are the critical element in the book. Other useful information mentioned was the section on determining training needs and the list of possible sources for training.

The comments on the least useful information were varied. Several persons said that everything was useful--no wasted information. Other comments were received from only one person as follows:

- Why not indicate specific resources, i.e., <u>Encyclopedia of Associations</u>?

- More info [needed] on needs analysis

- How do you begin section

- I looked for more mention of supervisory type training/reference--think there is a great need at this level

- Examples regarding program choice

We also asked respondents which sections need revision. One person suggested listing addresses of trainers, videos, books and seminar leaders as a first source to locating more. Another respondent suggested revising the "How do you begin" section. Another suggested more examples from the small manufacturing sector.

C. Perceptions of the Guidebook by Small Business Development Centers

When we sent the guidebook to Small Business Development Centers to distribute to small business people, a few of them reviewed the guidebook and sent a questionnaire back to us. Of the four that did so, three were critical of the guidebook and one liked it very much. For instance, three of the four rated the usefulness of the guidebook below 4 on the 7-point scale. Those who were critical appeared to have the same reaction. The guidebook is too basic for them and they do not think it will be useful. One respondent feared that the guidebook might not be reliable or specific enough. Another wrote that the guidebook, "was designed for third grade reading." He went on to say, "As one who offers training your guide was so basic it was insulting to me as a reader. The pages have few words, great white space and no depth of analysis."

D. Discussion

The reaction to the guidebook was not uniform. Some respondents liked it very much and felt it would be very useful to them. Examples of these reactions are as follows:

- This is basically the process we use, but [it is] very nice to have in this booklet form.

- This guidebook is terrific! I wish we had it earlier this year. As it was, I had to do all of this work on my own through trial and error . . . Every training director and owner of a small business should get a copy of this.

- I intend to use this guidebook in developing training materials for start-up microbusinesses. While not exactly the use it was designed for, the book

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provides a useful framework to me in clarifying how such training could best be structured.

- I like the piece. It is something I would recommend or give to people in small and mid-sized businesses with whom I work. For its intended audience, it is the right combination of comprehensive but easy to use. There is a real tendency for those of us in the training/O.D. business to insist on saying too much, or cramming so much into a guidebook that it becomes hard to use or a turn off. You've hit the desired middle ground.

Others felt the guidebook was too simplistic, as reflected in some of the comments by the SBDC respondents and a few of the small businesses. It seems safe to conclude that this guidebook will not please everyone. For those who have little training background the book may give them just what they need. As they gain in sophistication they can go on to other sources of training information. For more experienced people, some will find the guidebook useful as a structure for decision-making or review. However, others may find it too basic.

Chapter 6. Discussion

This project has been concerned with helping small businesses improve their approach to training. The effort was timely in that it responded to a growing national recognition of the importance of small business to the American economy. The guidebook that was developed was specially designed to fit the capabilities and operational constraints of small businesses and was aimed at helping them compete in the global markets through better training practices.

The project was a departure from the mainstream of current research because it merged the interests of both the educational and training communities. The Department of Education funded the project, but many of the issues are traditional concerns of the Department of Labor. A fundamental assumption of the project is that business practice can be improved through education and training of the work force. The project demonsrates that training and education are on the same continuum and share the same fundamental concerns and goals -- human learning.

During the course of the project, AIR's research team learned a great deal about the needs and concerns of small business, especially as they relate to ways of improving the abilities and skills of the work force. More interestingly, perhaps, our work uncovered many other aspects about small businesses that are not well understood and deserve careful examination and research.

One issue that surfaced and was prevalent throughout the project is simply, what is a small business? We operated on the Federal definition that firms that employ less than 500 employees are "small business." Whatever value this categorization provides other government functions and interests, it is not particularly helpful in understanding training requirements and designing optimal training strategies. The definition of 500 employees or less covers a wide range of company resources and capabilities. A business with 400 employees that has a human resources department and training

specialists on staff is very different from a firm with 20 employees with no training expertise in any position.

Smaller businesses appear to be primarily occupied with survival. Training is frequently seen as a cost rather than an investment. Presidents or managers who take on the training function are busy tending to bottom line issues such as profit. While some of these managers may see training as desirable but unattainable, many others do not view it as important or as a way of improving productivity. Even those who provide training may do so to improve employee morale or other reasons unrelated to job performance. Company size thus seems to be a variable of significance in planning training. That is, the need for training and how to design and deliver needed training will vary as a function of company size. Our work on this project did not allow us to gain definitive insight into this issue, but it appears to be a worthwhile area of research that would contribute to finding ways of helping small business improve through training and education.

Current social trends also are influencing the training needs of small businesses just as they are for large business, but small businesses usually have less capability to understand the implications of these trends and to take appropriate action. The increase of immigrants, non-English speakers, and minorities in the labor force has profound influence on training needs. The downsizing of large companies is bringing a different mix of job seeker with different expectations and skills than many small firms commonly see. This, too, has training implications. The decline of manufacturing opportunities and concurrent increase in service-oriented business also bring different training needs to the workplace. The influx of new and rapidly changing technology affects how employees do their job in small companies as well as large corporations. The impact of trends such as these on small business training needs is another area of fruitful research.

In addition to what we have learned about small business, we have also some information about the training industry. The information needed to make an informed decision about a training program is difficult to obtain. Getting answers requires time and persistence that few businesses may have, even if they are large. The large national training companies employ sales personnel who are frequently more interested in selling than in meeting anyone's needs. Evaluation of training programs that are being marketed seem to be very rare, with the exception of trainee reactions. Programs are sold and used with little idea of whether they work or not. The need for a guidebook

such as the one developed in this project serves a very important function of trying to make purchasers of training and education programs more informed consumers.

Yet, certain training sources appear to be more critical in terms of any eventual solution to the problem than we realized as we began the project. Local organizations of small businesses, such as the Council for Entrepreneurial Development in North Carolina, are offering help that is relevant and useful. In addition, the community colleges appear to be attuned to the small business problem. They offer more courses than small businesses actually use. But even in these cases, the small business training user still should be able to judge the quality of training services or programs these sources offer.

More research should be done to understand more fully the problem of education and training in small businesses. Some companies are doing much more than others. What differentiates the company that does more relevant training from the one that does nothing? Is it strictly a function of size of the company? Perhaps the companies that really need help are those below a certain critical size. On the other hand, is the presence of a training professional the key factor?

For firms who are training some employees, what kinds of programs are they using most frequently? What programs appear to be most successful in terms of small business needs?

This is an area in which government help may have an impact. Before embarking on any program, however, one should be clear on what kinds of interventions are likely to be useful. Is cost the critical barrier to training in small businesses? If the cost of courses were subsidized, would more companies take advantage of them? Would it be more effective to put the money into the hands of individuals? If individuals had incentives or subsidies for training would they be more likely to take the initiative for their own development?

Even more fundamentally, how much of a benefit does a small firm get from training its employees? Do employees who are trained leave or do they stay and feel some loyalty to an employer who develops their potential? If the value of training could be demonstrated to small businesses would they be more likely to use it?

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The research agenda for probing the training and education needs of small business (and perhaps larger businesses as well) from the Department of Education perspective, is both broad and potentially rich. However, one of the lessons learned from this project is that the Department of Education is a largely foreign entity to the business community; it is not seen as a natural source of wisdom and help. Business managers and executives are familiar with and attend to initiatives, directives, and regulations issued by the Federal Department of Labor, Department of Commerce, Internal Revenue Service, Small Business Administration, etc., but rarely do they encounter the Federal agency that "oversees" their children's school. This is important because to gain the attention of small business and to enlist the cooperation of individual business firms in educationally-based research and development, support from business associations and groups for the research should be part of the research design. That is, support from such organizations as the National Federation of Independent Business, U.S. Chamber of Commerce, and the National Alliance of Business, either in the form of endorsements or as co-members of the research team, would facilitate access to the small business community for purposes of conducting training and educational research in the workplace.

In summary, we believe that our guidebook is a useful product for the small business person who is not a training professional. To use the guidebook, however, the firm needs to be actually seeking training for its staff. Our guidebook will not be of interest to a business that has no intention of providing training. Distribution of the guidebook through the right channels becomes even more important when faced with this reality. The next chapter discusses dissemination options.

Chapter 7. Dissemination Options

We investigated many options for disseminating the guidebook. We are most concerned that the guidebook reach its intended audience--small businesses. At the time of this writing a definite plan has not been made, but we do have possibilities. Organizations contacted include:

1. **National Alliance of Business**

    The National Alliance of Business publishes books and pamphlets and then sells them to members. Generally the NAB works with larger businesses. We sent a draft of the guidebook to Brenda Bell, Vice-President of Marketing, for review, but they were not interested in publishing the document through their own distribution network. They still may be willing to publicize the guidebook through their newsletter.

2. **Small Business Administration**

    We have had contact with George Solomon, who works with business education at the Small Business Administration. The SBA has an on-line information service that he thinks could possibly be used for disseminating the information in the guidebook. This would lose the advantage gained by our formatting the document so that it is easy to read, however. After publishing the document in hard copy, it may be worth considering whether an on-line version would be useful.

3. **National Federation of Independent Business**

    The NFIB never expressed any interest in our project. It is possible that the right people were never reached.

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4.   American Society for Training and Development

ASTD publishes a series of small guidebooks on various training topics called Info-Line. Members can subscribe to the series or buy individual copies. The price is $10, regardless of length.

We spoke to the editor of Info-line, Barbara Darrell, and also Nancy Olson, about our project. Publication through them is a possibility, but the initial review of the document by training professionals was not that positive. They would want substantial changes and reconsideration by the committee to publish it.

ASTD is a well-known and respected training organization. However, the audience for our guidebook is not training professionals, but rather people who do not have any training background. If the guidebook were published through ASTD it should be distributed through other channels as well.

5.   National Association of Small Business Development Centers

In major cities throughout the country Small Business Development Centers help new businesses get started and provide help and information for small businesses that are more established. They do not publish materials, but they do distribute them.

Regardless of publisher, the guidebook could be advertised at a booth at their annual convention in the fall. This could be an excellent way to have the center directors become aware of the guidebook.

6.   National Center for Manufacturing Sciences

The National Center for Manufacturing Sciences expressed early interest in the guidebook. They would like to distribute it through their 25 centers throughout the United States. This would reach the manufacturing sector, but not other sectors. A co-publishing arrangement with another company, such as Lakewood, might be a better option.

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The publications person at NCMS is Hilary Handwerger, who can be reached at (313) 995-0300. NCMS seems to be committed to publishing the guidebook in some form, but some details about the arrangements remain.

7. Lakewood Publications

Lakewood publishes <u>Training</u> magazine, as well as other publications in the training field. They are interested in possibly publishing the document if another organization that were closer to small business could help with distribution. Our contact there is Linda Klemstein at (612) 340-4848.

Currently they think they would like to broaden the audience for the guidebook beyond small businesses and include other material with the guidebook. They are comfortable with the concept that NCMS might publish the document in one way and they would do it another way.

8. U.S. Chamber of Commerce

A copy of the guidebook was sent to Raye Nelson at the Center for Workforce Preparation. Initially she was interested in possibly publishing the book, but has not been in contact with us recently. They do not appear to be enthusiastic to publish the guidebook.

References

American Society for Training and Development (1988). <u>Make or Buy: How to Decide</u>. Alexandria, VA: American Society for Training and Development.

American Society for Training and Development (1986). <u>Essentials for Evaluation</u>. Alexandria, VA: American Society for Training and Development.

Banks, M.C., Bures, A.L., Champion, D.L. (1987). Decision making factors in small business: training and development. <u>Journal of Small Business Management</u>, (July), 19-25.

Basarab, D.J. (1990). Calculating the return on training investment. <u>Evaluation Practice</u>, <u>11</u> (3), 177-185.

Bassi, L.J. (1992). Education in the workplace. Unpublished paper.

Bishop, J. (1991a). A program of research on the role of employer training in ameliorating skill shortages and enhancing productivity and competitiveness. Unpublished paper.

Bishop, J. (1991b). On-the-job training of new hires. Working paper 89-10, presented at the Conference on Market Failure in Training at Madison, Wisconsin, May 11-12, 1991.

Brandenburg, D.C. (1989). Evaluation and business issues: Tools for management decision making. <u>New Direction for Program Evaluation</u>, <u>44</u>, 83-99.

Brandenburg, D.C., Smith, M.E. (1986). <u>Evaluation of Corporate Training Programs</u>. Princeton, NJ: ERIC Clearinghouse on Tests, Measurement and Evaluation.

Brinkerhoff, R.O. (1987). <u>Achieving Results from Training: How to Evaluate Human Resource Development to Strengthen Programs and Increase Impact</u>. San Francisco, CA: Jossey-Bass.

Bushnell, D.S. (1990). Input, process, output: a model for evaluating training. <u>Training and Development Journal</u>, <u>44</u> (3), 41-43.

Business Council for Effective Literacy (1990). The large matter of small business. <u>BCEL Newsletter for the Business and Literacy Communities</u>, <u>24</u> (July), 1, 5-6.

Campbell, J.P., Dunnette, M.D., Lawler, E.E., Weick, K.E. (1970) <u>Managerial Behavior, Performance, and Effectiveness</u>. New York: McGraw-Hill.

Carnevale, A.P., Gainer, L.J., and Meltzer, A.S. (1990). Workplace Basics: The Essential Skills Employers Want. San Francisco, CA: Jossey-Bass Publishers.

Carnevale, A.P., Gainer, L.J., Villet, J. (1990). Training in America: The Organization and Strategic Role of Training. San Francisco, CA: Jossey-Bass.

Catalanello, R.E., Kirkpatrick, D.L. (1968). Evaluating Training Programs--the State of the Art. Training and Development Journal, 22 (5), 2-9.

Clegg, W.H. (1987). Management training evaluation: an update. Training and Development Journal, 41 (2), 65-71.

Coates, J.F., Jaratt, J., Mahaffie, J.B. (1991). Future work. The Futurist, (May-June), 9-19.

Commission on the Skills of the American Workforce (1990). America's Choice: High Skills or Low Wages. Rochester NY: National Center on Education and the Economy.

Creticos, P.A., Sheets, R.G. (1989). State-Financed, Workplace-based Retraining Programs--A Joint Study. Research Report #89-01. Springfield: VA, ERIC Document Reproduction Service.

Delaney, J.T., Lewin, D., Ichniowski, C. (1989). Human Resource Policies and Practices in American Firms. Washington, D.C.: Government Printing Office.

DeMeuse, K.P., Liebowitz, S.J. (1981). An empirical analysis of team-building research. Group and Organization Studies, 6 (3), 357-378.

Dixon, N.M. (1990). Evaluation: A Tool for Improving HRD Quality. San Diego, CA: University Associates.

Dubin, S.S., Mezack, M., Neidig, R. (1974). Improving the evaluation of management development programs. Training and Development Journal, 28 (6), 42-46.

Fairfield-Sonn, J.W. (1987). A strategic process model for small business training and development. Journal of Small Business Management, (January), 11-17.

Gagne, R.M., Briggs, L.J., Wager, W.W. (1988). Principles of Instructional Design. New York: Holt, Rinehart and Winston.

Grider, D.T., Capps, C.J., Toombs, L.A. (1990). Training evaluation: prescription for improvement. Business, (Jan-Mar), 20-24.

Hawthorne, E.M. (1987). Evaluating Employee Training Programs: A Research-Based Guide for Human Resources Managers. New York: Quorum Books.

Kanter, R.M. (1989). When Giants Learn to Dance. London: Simon and Schuster.

Kelly, L., Thompson, P.S. (1988). Using local resources for small-business training. Training and Development Journal, 42 (7), 54-55.

Kirkpatrick, D.L. (1978). Evaluating In-House Training Programs. Training and Development Journal, 32 (10), 6-9.

Kirkpatrick, D.L. (1967). Evaluation of Training. Chapter 5 in Craig and Bittel (eds.), Training and Development Handbook. New York: McGraw-Hill.

Kutner, M.A., Sherman, R.Z., Webb, L. (1991). A Review of the National Workplace Literacy Program. Washington, DC: U.S. Department of Education

Lee, C. (1991). Who gets trained in what--1991. Training, 28 (10), 47-59.

Lichtenstein, J. H. (1989). Training small business employees: Matching small business needs and public training policy Paper presented to the NFIB Conference on Labor Shortage, February 15, 1989.

Martin, V.G. (1983). Buying a training workshop: How to tell the terrible from the terrific. Training, 20 (7), 32-35.

Meridian Corporation (1991). ABA's Performance 2000 Demonstration Project. Report prepared for the National Alliance of Business.

Meridian Corporation (1991). The Environmental Technology Program at Southern Maine Technical College (SMTC) Report prepared for the National Alliance of Business.

National Alliance of Business (1991). Productivity's shifting balance. Work America, 8 (12), 2-3.

Nightingale, D.S., Wissoker, D.A., Burbridge, L.C., Bawden, D.L., Jeffries, W. (1991). Evaluation of the Massachusetts Employment and Training (ET) Program. Washington, DC: Urban Institute Press.

Office of Technology Assessment (1990). Worker Training: Competing in the New International Economy. Washington, DC: Government Printing Office.

Patton, M. Q. (1980). Qualitative Evaluation Methods. Beverly Hills: Sage.

Phillips, J. (1983). Evaluating outside resources. Chapter 11 in <u>Training Evaluation and Measurement Methods</u>. Houston, TX: Gulf Publishing.

Rogers, M.A., Volpe, S. (1984). Evaluation of vendor courses. <u>Performance and Instruction Journal</u>, <u>23</u>, 18-22.

Scriven, M. (1974). Evaluation perspectives and procedures. Pp. 1-93 in W.J. Popham (ed.), <u>Evaluation in Education</u>. Berkeley: McCutchan.

Sticht, T.G. (1991). <u>Evaluating National Workplace Literacy Programs</u>. Washington, DC: U.S. Department of Education.

Szabo, J.C. (1991). Finding the right workers. <u>Nation's Business</u>, (February), 16-22.

Szabo, J.C. (1990). Learning at work. <u>Nation's Business</u>, (February), 27-28.

Tartell, R. (1987). What to look for when you buy training. <u>Training and Development Journal</u>, <u>41</u> (1), 28-30.

U.S. Small Business Administration (1988). <u>Small Business in the American Economy</u>. Washington, D.C.: Government Printing Office.

WAVE, Inc. (1991). <u>Small Business Work-Based Learning Demonstration Project</u>. Unpublished report.

Yin, R.K. (1989). <u>Interorganizational Partnerships in Local Job Creation and Job Training Efforts: Six Case Studies</u>. Washington, DC: Cosmos Corporation.

APPENDIX

Program Evaluation Checklist

Name of Program_____

Name of Vendor_____

Rater's Initials_____

Type of Program (Choose only one from this list)

Management Skills/Development ☐
      Delegation Skills ☐
      Decision-making ☐
      Managing Change ☐
Supervisory Skills ☐
      Motivation ☐
      Problem Solving ☐
      Negotiating Skills ☐
Communication Skills ☐
      Interpersonal Skills ☐
      Team Building ☐
      Listening Skills ☐
      Writing Skills ☐
Basic Computer Skills ☐
      Word Processing ☐
      Personal Computer Applications ☐
      Computer Programming ☐
      Data Processing ☐
      Management Information Systems ☐
      Quality Improvement ☐
Customer Relations/Services ☐
Executive Development ☐
      Leadership ☐
Clerical/Secretarial Skills ☐
Personal Growth ☐
      Time Management ☐
      Goal Setting ☐
      Stress Management ☐

Which sources of information were available? (check all that apply)

☐ Brochure
☐ Interview   Position of person interviewed_____
☐ Examination of Course Materials
☐ Observation of Course (or portions of course)

For all of the following questions, indicate the source of the information by supplying a letter in front of each question using the following codes:

B--Brochure
I--Interview with vendor representative
M--Examination of course materials
O--Observation of course

I.   **Needs Analysis**

____ Is the vendor willing to do a training needs analysis?   □ Yes □ No

If yes, assume that there are 10 persons who possibly need to be trained in whatever the course is under consideration.

____   How much time would be needed to complete the analysis?_____ days

____   How much would such a TNA cost? $_____

____   What methods does the vendor propose for completing the TNA?

_____
_____

____ Is the vendor willing to guide a small business in completing a training needs analysis?   □ Yes   □ No

II. **Course Content**

____ Are training objectives listed for the program?   □ Yes □ No

____ Are these objectives measurable in behavioral terms?

□   All are measurable
□   Some are measurable
□   None are measurable

____ Is a course outline available?   □ Yes   □ No

If yes, are the subjects arranged in a logical sequence?   □ Yes   □ No

Comments_____

____ Are participant's competencies assessed before the program begins?   □ Yes   □ No

If yes, please explain _____

____ Are participant's competencies assessed after the program is completed?   □ Yes   □ No

If yes, please explain _____

____ Are adjustments in the course possible depending upon the backgrounds of the participants?

□ Yes □ No   If yes, explain_____

_____ What methods will be used in the training? (check all that apply)

- ☐ Lecture
- ☐ Self-study
- ☐ Video or Film
- ☐ Audios
- ☐ Interactive Video
- ☐ Computer-based Training
- ☐ Discussion
- ☐ Role-plays
- ☐ Case Studies
- ☐ Simulations
- ☐ Work Conferences
- ☐ Field Projects

_____ How appropriate do these methods appear to be for the subject matter involved?

_____
_____
_____
_____

_____ What opportunities are there for active learning?

_____
_____
_____

_____ What opportunities are there to practice new skills during the training?

_____
_____
_____

_____ During these practice periods, how is feedback on performance given?

_____
_____
_____

_____ Does the course emphasize the context of the job/company of the participants rather than just presenting material without a context?

☐ Yes ☐ No

If yes, describe_____
_____
_____
_____

_____ Does the instructor have direct experience with the subject matter being taught?

☐ Yes ☐ No

If yes, describe_____

_____ How long has the instructor been teaching this course?

☐ Has never taught it
☐ 1 to 5 offerings
☐ 6 to 10 offerings
☐ 11 to 15 offerings
☐ 16 offerings or more

_____ Are ratings of the instructor available?   ☐ Yes ☐ No

If yes, please describe_____

III.   Past Experience

_____ Number of times program has been given _____

_____ Number of different companies for whom the program has been given _____

_____ Number of small businesses (< 500 employees) that have used the program _____

_____ Are any adjustments made for small businesses? ☐ Yes   ☐ No

If yes, what are they?

_____

_____

_____ Is vendor willing to supply names of clients for whom program has been run?

☐ Yes   ☐ No

IV.   Cost

_____ Length of program (fill in only one) _____hours _____days _____weeks

_____ Program cost per participant $ _____

_____ Are discounts available?   ☐ Yes   ☐ No

If yes, what kind of discount?_____

_____ Additional costs

Facility fee $_____

Materials $_____

Equipment $_____

Other $_____

V. Availability

_____ Assume that 10 employees will attend this program, how soon could the course be offered?

- ☐ Less than 1 week
- ☐ 1 to 5 weeks
- ☐ 6 to 10 weeks
- ☐ 11 to 15 weeks
- ☐ More than 15 weeks

_____ When can the program be offered? (check all that apply)

- ☐ Monday through Friday during normal work hours
- ☐ Evenings
- ☐ Weekends
- ☐ Other _____

VI. Evidence of Effectiveness

_____ What evidence of effectiveness is available? (check all that apply)

- ☐ Selected testimonials from users
- ☐ Trainee reactions to the program
- ☐ Assessment of participant performance and knowledge by tests (pre-test, post-test, etc.)

Describe_____

- ☐ Long-term validation study showing changes in behavior on the job over time

Describe_____

- ☐ Long-term validation study showing the effect of the training on organizational results

Describe_____

- ☐ Other _____

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